

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1600RXA

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	DEC 05	CASREACT(R) - Over 10 million reactions available
NEWS	4	DEC 14	2006 MeSH terms loaded in MEDLINE/LMEDLINE
NEWS	5	DEC 14	2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
NEWS	6	DEC 14	CA/Caplus to be enhanced with updated IPC codes
NEWS	7	DEC 21	IPC search and display fields enhanced in CA/Caplus with the IPC reform
NEWS	8	DEC 23	New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/USPAT2
NEWS	9	JAN 13	IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS	10	JAN 13	New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to INPADOC
NEWS	11	JAN 17	Pre-1988 INPI data added to MARPAT
NEWS	12	JAN 17	IPC 8 in the WPI family of databases including WPIFV
NEWS	13	JAN 30	Saved answer limit increased
NEWS	14	JAN 31	Monthly current-awareness alert (SDI) frequency added to TULSA
NEWS	15	FEB 21	STN AnaVist, Version 1.1, lets you share your STN AnaVist visualization results
NEWS	16	FEB 22	Status of current WO (PCT) information on STN
NEWS	17	FEB 22	The IPC thesaurus added to additional patent databases on STN
NEWS	18	FEB 22	Updates in EPFULL; IPC 8 enhancements added
NEWS	19	FEB 27	New STN AnaVist pricing effective March 1, 2006
NEWS	20	FEB 28	MEDLINE/LMEDLINE reload improves functionality
NEWS	21	FEB 28	TOXCENTER reloaded with enhancements
NEWS	22	FEB 28	REGISTRY/ZREGISTRY enhanced with more experimental spectral property data
NEWS	23	MAR 01	INSPEC reloaded and enhanced
NEWS	24	MAR 03	Updates in PATDPA; addition of IPC 8 data without attributes
NEWS	25	MAR 08	X.25 communication option no longer available after June 2006
NEWS EXPRESS			FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005. V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT <a href="http://download.cas.org/express/v8.0-Discover/">http://download.cas.org/express/v8.0-Discover/</a>
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific

research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 08:34:46 ON 09 MAR 2006

=> fil caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CAPLUS' ENTERED AT 08:35:04 ON 09 MAR 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 9 Mar 2006 VOL 144 ISS 11

FILE LAST UPDATED: 8 Mar 2006 (20060308/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s jp200017145/pn

L1 0 JP200017145/PN

=> s jp0017145/pn

L2 0 JP0017145/PN

=> s jp2000-17145/pn

L3 1 JP2000-17145/PN  
(JP2000017145/PN)

=> d

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2000:37940 CAPLUS  
 DN 132:79372  
 TI Thermosetting novolak resin compositions with good curability, and  
 molding materials therefrom  
 IN Oka, Wataru; Orihara, Tamotsu  
 PA Sumitomo Bakelite Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JMOQAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1  

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000017145	A2	20000118	JP 1998-184487	19980630

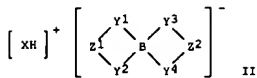
 <--  
 PRAI JP 1998-184487 19980630  
 OS MARPAT 132:79372

=> d ibib abs

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2000:37940 CAPLUS  
 DOCUMENT NUMBER: 132:79372  
 TITLE: Thermosetting novolak resin compositions with good curability, and molding materials therefrom  
 INVENTOR(S): Oka, Wataru; Orihara, Tamotsu  
 PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKKKAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000017145	A2	20000118	JP 1998-184487	19980630

<--  
 PRIORITY APPLN. INFO.: JP 1998-184487 19980630  
 OTHER SOURCE(S): MARPAT 132:79372  
 GI



AB The comps. contain novolak resins, hexamethylenetetramine (I), and onium borates II (X = N-containing heterocyclic compound; Z1, Z2 = aromatic or alicyclic group; Y1-Y4 = proton donor group residue). Thus, novolak resin 100, I 16, II (X = DBU, Y1Z1Y2 = Y3Z2Y4 = O-o-C6H4CO2) 8 parts, and fillers are mixed and transfer-molded to give a test piece showing Barcol hardness 68 and bending strength 102 and 63 MPa, at room temperature and 120°, resp.

```
=> s jpl1-209583/pn
L4      1 JP11-209583/PN
        (JP11209583/PN)
```

```
=> d ibib abs
```

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:481505 CAPLUS  
 DOCUMENT NUMBER: 131:130718  
 TITLE: Epoxy resin compositions for prepregs and laminated circuit boards  
 INVENTOR(S): Go, Yoshiyuki; Miyake, Sumiya; Nagata, Hiroshi; Okubo,  
 Akiko; Kobayashi, Minoru  
 PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKQKAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11209583	A2	19990803	JP 1998-11829	19980123

<--  
 PRIORITY APPLN. INFO.: JP 1998-11829 19980123

OTHER SOURCE(S): MARPAT 131:130718  
 AB Title epoxy resin comps., which is stable at room temperature and fat curing upon heating, comprise an epoxy resin, a polyamine curing agent, and a curing accelerator of an onium borate. Thus a bisphenol A-based epoxy resin 100 parts, diaminodiphenylmethane 0.2 parts, dicyandiamide 0.3 parts, and DBU salt of 2-hydroxybenzoic acid boron complex 2.5 parts were mixed to give an epoxy composition of this invention. Two pieces of glass cloths were impregnated with the above composition to two prepregs which were laminated with an printed circuit board by vacuum compression while heating to give a laminated board.

=> s jpl1-171981/pn  
L5 1 JP11-171981/PN  
(JP11171981/PN)

=> d ibib abs



L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:407164 CAPLUS  
 DOCUMENT NUMBER: 131:103041  
 TITLE: Storage-stable epoxy resin compositions containing ammonium borates as latent crosslinking accelerators  
 INVENTOR(S): Miyake, Sumiya; Go, Yoshiyuki; Nagata, Hiroshi; Okubo,  
 Akiko; Kobayashi, Minoru  
 PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKOKAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11171981	A2	19990629	JP 1997-340126	19971210
JP 3690710	B2	20050831	JP 1997-340126	19971210

PRIORITY APPLN. INFO.: JP 1997-340126 19971210

OTHER SOURCE(S): MARPAT 131:103041  
 GI For diagram(s), see printed CA Issue.  
 AB Title comps., useful for elec. an electronic devices, etc., contain hardeners and X+ BY1Y2Y3Y4- [X+ = (substituted) ammonium; Z1 of Y1-Y4 = H+-donating group residue after releasing 1 H+, the rest of Y1-Y4 = aromatic, heterocyclic, or aliphatic group] or I (Y9-Y10 are same as Y1-Y4;  
 Y11-Y12 = H+-donating group residue after release of H+). Thus, o-cresol novolak epoxy resin (ECCN 102065) 67, phenol novolak 33, pulverized fused silica 300, carnauba wax 2, and Ph4N+ (BzO)4B- 3.1 part was mixed and roll-kneaded at 90° for 5 min to give title composition having initial spiral flow 83 cm and 79 cm after 3-day storage at 40°.

=> fil reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	23.25	23.46
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.25	-2.25

FILE 'REGISTRY' ENTERED AT 08:40:21 ON 09 MAR 2006  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 8 MAR 2006 HIGHEST RN 876273-86-8  
DICTIONARY FILE UPDATES: 8 MAR 2006 HIGHEST RN 876273-86-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> fil stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.44	23.90
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-2.25

FILE 'STNGUIDE' ENTERED AT 08:40:24 ON 09 MAR 2006  
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT  
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE  
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

15.79

404.57

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-2.25

-4.50

STN INTERNATIONAL LOGOFF AT 08:49:36 ON 09 MAR 2006

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1600RXA

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 DEC 05 CASREACT(R) - Over 10 million reactions available  
NEWS 4 DEC 14 2006 MeSH terms loaded in MEDLINE/LMEDLINE  
NEWS 5 DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER  
NEWS 6 DEC 14 CA/CAPLUS to be enhanced with updated IPC codes  
NEWS 7 DEC 21 IPC search and display fields enhanced in CA/CAPLUS with the  
IPC reform  
NEWS 8 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/  
USPAT2  
NEWS 9 JAN 13 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB  
NEWS 10 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to  
INPADOC  
NEWS 11 JAN 17 Pre-1988 INPI data added to MARPAT  
NEWS 12 JAN 17 IPC 8 in the WPI family of databases including WPIFV  
NEWS 13 JAN 30 Saved answer limit increased  
NEWS 14 JAN 31 Monthly current-awareness alert (SDI) frequency  
added to TULSA  
NEWS 15 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist  
visualization results  
NEWS 16 FEB 22 Status of current WO (PCT) information on STN  
NEWS 17 FEB 22 The IPC thesaurus added to additional patent databases on STN  
NEWS 18 FEB 22 Updates in EPFULL; IPC 8 enhancements added  
NEWS 19 FEB 27 New STN AnaVist pricing effective March 1, 2006  
NEWS 20 FEB 28 MEDLINE/LMEDLINE reload improves functionality  
NEWS 21 FEB 28 TOXCENTER reloaded with enhancements  
NEWS 22 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral  
property data  
NEWS 23 MAR 01 INSPEC reloaded and enhanced  
NEWS 24 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes  
NEWS 25 MAR 08 X.25 communication option no longer available after June 2006

NEWS EXPRESS    FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,  
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.  
V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT  
<http://download.cas.org/express/v8.0-Discover/>

NEWS HOURS      STN Operating Hours Plus Help Desk Availability  
NEWS INTER      General Internet Information  
NEWS LOGIN      Welcome Banner and News Items  
NEWS PHONE      Direct Dial and Telecommunication Network Access to STN  
NEWS WWW        CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that  
specific topic.

All use of STN is subject to the provisions of the STN Customer  
agreement. Please note that this agreement limits use to scientific  
research. Use for software development or design or implementation  
of commercial gateways or other similar uses is prohibited and may  
result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 08:50:55 ON 09 MAR 2006

=> fil caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'CAPLUS' ENTERED AT 08:51:09 ON 09 MAR 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is  
held by the publishers listed in the PUBLISHER (PB) field (available  
for records published or updated in Chemical Abstracts after December  
26, 1996), unless otherwise indicated in the original publications.  
The CA Lexicon is the copyrighted intellectual property of the  
American Chemical Society and is provided to assist you in searching  
databases on STN. Any dissemination, distribution, copying, or storing  
of this information, without the prior written consent of CAS, is  
strictly prohibited.

FILE COVERS 1907 - 9 Mar 2006 VOL 144 ISS 11

FILE LAST UPDATED: 8 Mar 2006 (20060308/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.  
They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s us20020015883

L1                0 US20020015883

=> s us20020015883/pn

L2                1 US20020015883/PN  
                  (US2002015883/PN)

```
=> select l2
ENTER ANSWER NUMBER OR RANGE (1-):1
ENTER DISPLAY CODE (TI) OR ?:rn
E1 THROUGH E14 ASSIGNED
```

```
=> fil reg
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                               ENTRY      SESSION
FULL ESTIMATED COST          4.44        4.65
```

FILE 'REGISTRY' ENTERED AT 08:51:38 ON 09 MAR 2006  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 8 MAR 2006 HIGHEST RN 876273-86-8  
DICTIONARY FILE UPDATES: 8 MAR 2006 HIGHEST RN 876273-86-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

```
*****
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,  *
* effective March 20, 2005. A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                    *
*****
```

Structure search iteration limits have been increased. See HELP SLIMITS  
for details.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

```
=> s e1-e14
1 10043-35-3/BI
  (10043-35-3/RN)
1 156762-86-6/BI
  (156762-86-6/RN)
1 161589-07-7/BI
  (161589-07-7/RN)
1 244761-29-3/BI
  (244761-29-3/RN)
1 250358-46-4/BI
  (250358-46-4/RN)
1 376650-04-3/BI
```

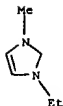
(376650-04-3/RN)  
1 376650-05-4/BI  
(376650-05-4/RN)  
1 376650-06-5/BI  
(376650-06-5/RN)  
1 376650-07-6/BI  
(376650-07-6/RN)  
1 50-21-5/BI  
(50-21-5/RN)  
1 6153-56-6/BI  
(6153-56-6/RN)  
1 616-47-7/BI  
(616-47-7/RN)  
1 65039-09-0/BI  
(65039-09-0/RN)  
1 75-00-3/BI  
(75-00-3/RN)  
L3 14 (10043-35-3/BI OR 156762-86-6/BI OR 161589-07-7/BI OR 244761-29-  
3/BI OR 250358-46-4/BI OR 376650-04-3/BI OR 376650-05-4/BI OR  
376650-06-5/BI OR 376650-07-6/BI OR 50-21-5/BI OR 6153-56-6/BI  
OR 616-47-7/BI OR 65039-09-0/BI OR 75-00-3/BI)

=> d l3 1-14

L3 ANSWER 1 OF 14 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 376650-07-6 REGISTRY  
 ED Entered STN: 19 Dec 2001  
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, (T-4)-bis[2-(hydroxy-  
 xO)propanoato(2-)-xO]borate(1-) (9CI) (CA INDEX NAME)  
 MF C6 H11 N2 . C6 H8 B O6  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

CM 1

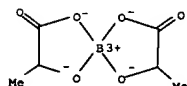
CRN 65039-03-4  
 CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 31168-89-5  
 CMF C6 H8 B O6  
 CCI CCS

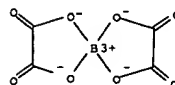


1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 14 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 376650-06-5 REGISTRY  
 ED Entered STN: 19 Dec 2001  
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, (T-4)-bis[ethanedioato(2-)-  
 xO1,xO2]borate(1-) (9CI) (CA INDEX NAME)  
 MF C6 H11 N2 . C4 B O8  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

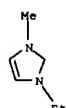
CM 1

CRN 125579-65-9  
 CMF C4 B O8  
 CCI CCS



CM 2

CRN 65039-03-4  
 CMF C6 H11 N2

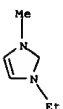


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 3 OF 14 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 376650-05-4 REGISTRY  
 ED Entered STN: 19 Dec 2001  
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, (T-4)-bis[2-(hydroxy-  
 xO)benzoato(2-)-xO]borate(1-) (9CI) (CA INDEX NAME)  
 MF C14 H8 B O6 . C6 H11 N2  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

CM 1

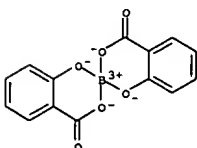
CRN 65039-03-4  
 CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 38403-08-6  
 CMF C14 H8 B O6  
 CCI CCS

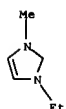


1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 4 OF 14 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 376650-04-3 REGISTRY  
 ED Entered STN: 19 Dec 2001  
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, (T-4)-bis[1,2-benzenediolato(2-)-  
 xO,xO']borate(1-) (9CI) (CA INDEX NAME)  
 MF C12 H8 B O4 . C6 H11 N2  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

CM 1

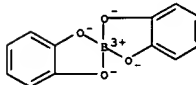
CRN 65039-03-4  
 CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

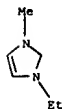
CM 2

CRN 16986-25-7  
 CMF C12 H8 B O4  
 CCI CCS



1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

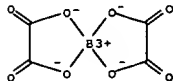
L3 ANSWER 5 OF 14 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 250358-46-4 REGISTRY  
 ED Entered STN: 09 Dec 1999  
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, hydroxide (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 1-Ethyl-3-methylimidazolium hydroxide  
 MF C6 H11 N2 . H O  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT, USPATFULL  
 CRN (65039-03-4)



● OH<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 8 REFERENCES IN FILE CA (1907 TO DATE)  
 8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 6 OF 14 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 244761-29-3 REGISTRY  
 ED Entered STN: 21 Oct 1999  
 CN Borate(1-), bis[ethanedioato(2-)-κO1,κO2]-, lithium, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN Lithium bis(oxalato)borate  
 CN Lithium bis(oxalato)borate(1-)  
 MF C4 B O8 . Li  
 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, CSCHM, TOXCENTER, USPAT2, USPATFULL  
 CRN (125579-65-9)

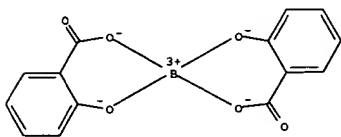


● Li<sup>+</sup>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

141 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 143 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 7 OF 14 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 161589-07-7 REGISTRY  
 ED Entered STN: 17 Mar 1995  
 CN Borate(1-), bis[2-(hydroxy-κO)benzoato(2-)-κO]-, lithium, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Borate(1-), bis[2-hydroxybenzoato(2-)-O1,O2]-, lithium, (T-4)-  
 OTHER NAMES:  
 CN AD 25  
 CN AD 25 (complex)  
 DR 496804-82-1  
 MF C14 H8 B O6 . Li  
 CI CCS  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT, USPAT2, USPATFULL  
 CRN (38403-08-6)

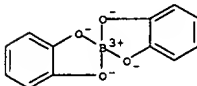


● Li<sup>+</sup>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

22 REFERENCES IN FILE CA (1907 TO DATE)  
 22 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 8 OF 14 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 156762-86-6 REGISTRY  
 ED Entered STN: 03 Aug 1994  
 CN Borate(1-), bis[1,2-benzenediolato(2-)-κO,κO']-, lithium, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Borate(1-), bis[1,2-benzenediolato(2-)-O,O']-, lithium, (T-4)-  
 DR 244771-83-3  
 MF C12 H8 B O4 . Li  
 CI CCS, COM  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT, DETHERM\*, TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 CRN (16986-25-7)



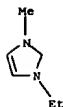
● Li<sup>+</sup>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

26 REFERENCES IN FILE CA (1907 TO DATE)  
 26 REFERENCES IN FILE CAPLUS (1907 TO DATE)



L3 ANSWER 9 OF 14 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 65039-09-0 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, chloride (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 1-Ethyl-3-methyl-1H-imidazolium chloride  
 CN 1-Ethyl-3-methylimidazolium chloride  
 CN 1-Methyl-3-ethylimidazolium chloride  
 CN 1-Methyl-3-ethylimidazolium chloride  
 CN 3-Ethyl-1-methylimidazolium chloride  
 CN N-Methyl-N'-ethylimidazolium chloride  
 DR 140611-60-5  
 MF C6 H11 N2 . Cl  
 CI COM  
 LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS, CSCEM,  
 DETHERM\*, GHELIN\*, MSDS-OHS, TOXCENTER, USP2, USP2FULL  
 (\*File contains numerically searchable property data)  
 CRN (65039-03-4)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

692 REFERENCES IN FILE CA (1907 TO DATE)  
 9 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 693 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 11 OF 14 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 6153-56-6 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Ethanedioic acid, dihydrate (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Oxalic acid, dihydrate (8CI)  
 OTHER NAMES:  
 CN Oxalic acid dihydrate  
 MF C2 H2 O4 . 2 H2 O  
 LC STN Files: ANABSTR, AQUIRE, BEILSTEIN\*, BIOSIS, CA, CAPLUS, CASREACT,  
 CHEMCATS, CHEMLIST, CSCEM, DETHERM\*, GHELIN\*, HSDB\*, IFCDB, IFIPAT,  
 IFIUDB, IPA, MSDS-OHS, SPECINFO, TOXCENTER, USP2, USP2FULL  
 (\*File contains numerically searchable property data)  
 CRN (144-62-7)



● 2 H<sub>2</sub>O

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

315 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 315 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 10 OF 14 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 10043-35-3 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Boric acid (H3BO3) (6CI, 8CI, 9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN Basilit B  
 CN BC 140  
 CN Boracic acid  
 CN Boric acid  
 CN Boric acid (B(OH)3)  
 CN Borofax  
 CN Boron trihydroxide  
 CN Bortrac  
 CN CB BORID  
 CN Dia Flea-Mate  
 CN Dr.'s 1 Flea Terminator DF  
 CN Dr.'s 1 Flea Terminator DFPBO  
 CN Dr.'s 1 Flea Terminator DT  
 CN Dr.'s 1 Flea Terminator DTPBO  
 CN Flea Prufe  
 CN MSC 81726  
 CN Orthoboric acid  
 CN Orthoboric acid (B(OH)3)  
 CN Orthoboric acid (H3BO3)  
 CN Roach Away  
 CN Roach Prufe  
 CN Super Flea Eliminator  
 CN Trihydroxyborane  
 AR 11113-50-1  
 DR 12795-04-9  
 MF B H3 O3  
 CI COM  
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOSIS, BIOTECHNO, CA,  
 CABA, CAOLD, CAPLUS, CASREACT, CSNB, CHEMCATS, CHEMINFORMRX, CHEMLIST,  
 CIN, CSCEM, CSNB, DETHERM\*, DIOGENES, DIPPR\*, EMBASE, ENCOMPLIT,  
 ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GHELIN\*, HSDB\*, IFCDB, IFIPAT,  
 IFIUDB, IPA, MRCK\*, MSDS-OHS, NIOSHTIC, PDLCOM\*, PIRA, PROMT, PS,  
 RTECS\*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USP2, USP2FULL,  
 VTB (\*File contains numerically searchable property data)  
 Other Sources: DSL\*, EINECS\*, TSCA\*  
 (\*\*Enter CHEMLIST file for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

27542 REFERENCES IN FILE CA (1907 TO DATE)  
 1854 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 27591 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L3 ANSWER 12 OF 14 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 616-47-7 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN 1H-Imidazole, 1-methyl- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Imidazole, 1-methyl- (6CI, 7CI, 8CI)  
 OTHER NAMES:  
 CN 1-Methyl-1H-imidazole  
 CN 1-Methylimidazole  
 CN Araldite DY 070  
 CN DY 070  
 CN N-Methylimidazole  
 CN N-methylimidazole  
 CN N1-Methylimidazole  
 CN NSC 88064  
 FS 3D CONCORD  
 DR 864745-22-2, 120418-32-8, 69723-05-3, 142504-34-5, 110069-11-9  
 MF C4 H6 N2  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOSIS, BIOTECHNO, CA, CAOLD,  
 CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCEM, CSNB,  
 DDFU, DETHERM\*, DRUGU, EMBASE, GHELIN\*, IFCDB, IFIPAT, IFIUDB, IPA,  
 MEDLINE, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE,  
 TOXCENTER, USP2, USP2FULL  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*, EINECS\*, TSCA\*  
 (\*\*Enter CHEMLIST file for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3634 REFERENCES IN FILE CA (1907 TO DATE)  
 219 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 3649 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 31 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L3 ANSWER 13 OF 14 REGISTRY COPYRIGHT 2006 ACS on STN

RN 75-00-3 REGISTRY

ED Entered STN: 16 Nov 1984

CN Ethane, chloro- (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN Aethylis

CN Aethylis chloridum

CN Anodynnon

CN Chelen

CN Chlorene

CN Chlorethyl

CN Chloridum

CN Chloroethane

CN Chloryl

CN chloryl Anesthetic

CN Chloryle anesthetic

CN Cloretilo

CN Dublofix

CN Ether chloratus

CN Ether hydrochloric

CN Ether muriatic

CN Ethyl chloride

CN F 160

CN Hydrochloric ether

CN Kelene

CN Monochloroethane

CN Monochloroethane

CN Muriatic ether

CN Narcotile

CN R 160

FS 3D CONCORD

MF C2 H5 Cl

CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOSIS, BIOTECHNO,

CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST,

CHEMSAFE, CIN, CSCEM, CSNB, DDFU, DETHERM\*, DIOGENES, DIPPR\*, DRUGU,

EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPAT, ENCOMPAT2, GHELIN\*, HSDB\*,

IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC,

PDLCOM\*, PROMT, PS, RTECS\*, SCISEARCH, SPECINFO, SYNTHLINE, TOXCENTER,

TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*Enter CHEMLIST File for up-to-date regulatory information)

H3C-CH2-Cl

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4513 REFERENCES IN FILE CA (1907 TO DATE)

65 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

4515 REFERENCES IN FILE CAPLUS (1907 TO DATE)

5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L3 ANSWER 14 OF 14 REGISTRY COPYRIGHT 2006 ACS on STN

RN 50-21-5 REGISTRY

ED Entered STN: 16 Nov 1984

CN Propanoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Lactic acid (7CI, 8CI)

OTHER NAMES:

CN (±)-Lactic acid

CN α-Hydroxypropanoic acid

CN α-Hydroxypropionic acid

CN 2-Hydroxy-2-methylacetic acid

CN 2-Hydroxypropanoic acid

CN 2-Hydroxypropionic acid

CN Biolac

CN Chem-Cast

CN DL-Lactic acid

CN dl-Lactic acid

CN E 270

CN Milk acid

CN NSC 367919

CN Purac FCC 80

CN Purac FCC 88

CN Tonsillozan

AR 849585-22-4

FS 3D CONCORD

DR 152-36-3, 598-82-3

MF C3 H6 O3

CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOSIS, BIOTECHNO,

CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX,

CHEMLIST, CIN, CSCEM, CSNB, DDFU, DETHERM\*, DIOGENES, DIPPR\*, DRUGU,

EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPAT, ENCOMPAT2, GHELIN\*, HSDB\*,

IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IPA, MEDLINE, MRCK\*, MSDS-OHS,

NAPRALERT, NIOSHTIC, PATDPASPC, PDLCOM\*, PIRA, PROMT, PS, RTECS\*,

SPECINFO, SYNTHLINE, TOXCENTER, TULSA, USAN, USPAT2, USPATFULL, VETU,

VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*Enter CHEMLIST File for up-to-date regulatory information)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

53297 REFERENCES IN FILE CA (1907 TO DATE)

1984 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

53385 REFERENCES IN FILE CAPLUS (1907 TO DATE)

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1600RXA

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	DEC 05	CASREACT(R) - Over 10 million reactions available
NEWS	4	DEC 14	2006 MeSH terms loaded in MEDLINE/LMEDLINE
NEWS	5	DEC 14	2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
NEWS	6	DEC 14	CA/Caplus to be enhanced with updated IPC codes
NEWS	7	DEC 21	IPC search and display fields enhanced in CA/Caplus with the IPC reform
NEWS	8	DEC 23	New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/USPAT2
NEWS	9	JAN 13	IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS	10	JAN 13	New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to INPADOC
NEWS	11	JAN 17	Pre-1988 INPI data added to MARPAT
NEWS	12	JAN 17	IPC 8 in the WPI family of databases including WPIFV
NEWS	13	JAN 30	Saved answer limit increased
NEWS	14	JAN 31	Monthly current-awareness alert (SDI) frequency added to TULSA
NEWS	15	FEB 21	STN AnaVist, Version 1.1, lets you share your STN AnaVist visualization results
NEWS	16	FEB 22	Status of current WO (PCT) information on STN
NEWS	17	FEB 22	The IPC thesaurus added to additional patent databases on STN
NEWS	18	FEB 22	Updates in EPFULL; IPC 8 enhancements added
NEWS	19	FEB 27	New STN AnaVist pricing effective March 1, 2006
NEWS	20	FEB 28	MEDLINE/LMEDLINE reload improves functionality
NEWS	21	FEB 28	TOXCENTER reloaded with enhancements
NEWS	22	FEB 28	REGISTRY/ZREGISTRY enhanced with more experimental spectral property data
NEWS	23	MAR 01	INSPEC reloaded and enhanced
NEWS	24	MAR 03	Updates in PATDPA; addition of IPC 8 data without attributes
NEWS	25	MAR 08	X.25 communication option no longer available after June 2006
NEWS EXPRESS			FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005. V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT <a href="http://download.cas.org/express/v8.0-Discover/">http://download.cas.org/express/v8.0-Discover/</a>
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific

research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 09:13:16 ON 09 MAR 2006

=> fil reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 09:13:25 ON 09 MAR 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 8 MAR 2006 HIGHEST RN 876273-86-8  
DICTIONARY FILE UPDATES: 8 MAR 2006 HIGHEST RN 876273-86-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> ....Testing the current file.... screen

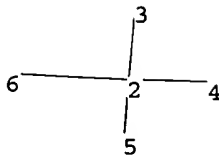
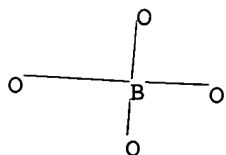
ENTER SCREEN EXPRESSION OR (END):end

=> screen 2040

L1 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\QUERIES\09866926.str



```
ring/chain nodes :
2 3 4 5 6
ring/chain bonds :
2-3 2-4 2-5 2-6
exact/norm bonds :
2-3 2-4 2-5 2-6
```

G1:C,H,X,Cb

Match level :  
2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS

L2 STRUCTURE UPLOADED

=> que L2 AND L1

L3 QUE L2 AND L1

=> ....Testing the current file.... screen

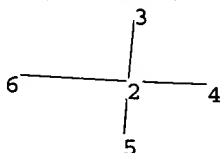
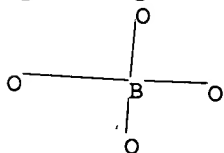
ENTER SCREEN EXPRESSION OR (END):end

=> screen 2040

L4 SCREEN CREATED

=>

Uploading C:\Program Files\Stnexp\Queries\QUERIES\09866926.str



```
ring/chain nodes :
2 3 4 5 6
ring/chain bonds :
2-3 2-4 2-5 2-6
exact/norm bonds :
2-3 2-4 2-5 2-6
```

G1:C,H,X,Cb

Match level :  
2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS

L5 STRUCTURE UPLOADED

=> que L5 AND L4

L6 QUE L5 AND L4

=> s l6

SAMPLE SEARCH INITIATED 09:15:13 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1885 TO ITERATE

100.0% PROCESSED 1885 ITERATIONS

50 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 35096 TO 40304

PROJECTED ANSWERS: 5566 TO 7754

L7 50 SEA SSS SAM L5 AND L4

=> s l6 full

FULL SEARCH INITIATED 09:15:18 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 37720 TO ITERATE

100.0% PROCESSED 37720 ITERATIONS ( 1 INCOMPLETE)

6459 ANSWERS

SEARCH TIME: 00.00.01

L8 6459 SEA SSS FUL L5 AND L4

=> d his

(FILE 'HOME' ENTERED AT 09:13:16 ON 09 MAR 2006)

FILE 'REGISTRY' ENTERED AT 09:13:25 ON 09 MAR 2006

L1 SCREEN 2040

L2 STRUCTURE UPLOADED

L3 QUE L2 AND L1

L4 SCREEN 2040

L5 STRUCTURE UPLOADED

L6 QUE L5 AND L4

L7 50 S L6

L8 6459 S L6 FULL

=> s l3 subset=l8 full

FULL SUBSET SEARCH INITIATED 09:15:30 FILE 'REGISTRY'

FULL SUBSET SCREEN SEARCH COMPLETED - 6459 TO ITERATE

100.0% PROCESSED 6459 ITERATIONS

208 ANSWERS

SEARCH TIME: 00.00.01

L9 208 SEA SUB=L8 SSS FUL L2 AND L1

=> s l9 and caplus/lc

49978644 CAPLUS/LC

L10 185 L9 AND CAPLUS/LC

=> s l9 not l10

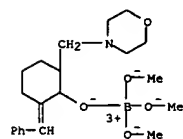
L11 23 L9 NOT L10

=> d l11 1-23

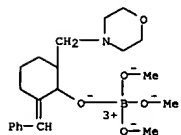
L11 ANSWER 1 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 852521-06-3 REGISTRY  
 ED Entered STN: 20 Jun 2005  
 CN INDEX NAME NOT YET ASSIGNED  
 MF C16 H74 B32 N16 O88 V10 Zn10  
 CI CCS, COM  
 SR CA

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

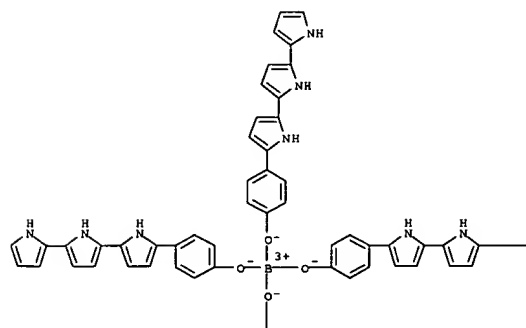
L11 ANSWER 2 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 795260-79-6 REGISTRY  
 ED Entered STN: 09 Dec 2004  
 CN Borate(1-), trimethoxy[rel-(1R,2R,6E)-2-(4-morpholinylmethyl)-6-(phenylmethylene)cyclohexanolato-κO]-, (T-4)- (9CI) (CA INDEX NAME)  
 MF C21 H33 B N O5  
 CI CCS, COM  
 SR CA



L11 ANSWER 3 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 795260-63-8 REGISTRY  
 ED Entered STN: 09 Dec 2004  
 CN Borate(1-), trimethoxy[rel-(1R,2S,6E)-2-(4-morpholinylmethyl)-6-(phenylmethylene)cyclohexanolato-κO]-, (T-4)- (9CI) (CA INDEX NAME)  
 MF C21 H33 B N O5  
 CI CCS, COM  
 SR CA



L11 ANSWER 4 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 792183-53-0 REGISTRY  
 ED Entered STN: 05 Dec 2004  
 CN Borate(1-), tetrakis(4-[2,2':5',2''-ter-1H-pyrrol]-5-ylphenolato-κO)- (9CI) (CA INDEX NAME)  
 MF C72 H56 B N12 O4  
 CI CCS, COM  
 SR CA

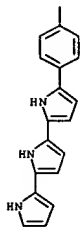


PAGE 1-A

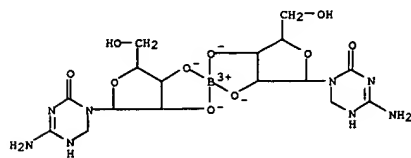
PAGE 1-B



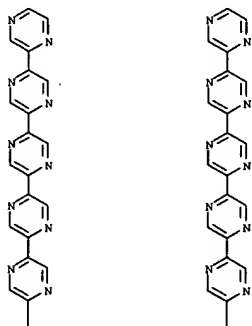
PAGE 2-A



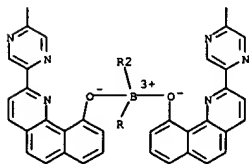
```
L11 ANSWER 5 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN
RN 792132-76-4 REGISTRY
ED Entered STN: 05 Dec 2004
CN Borate-[1-], bis[4-amino-1-β-D-ribofuranosyl-],3,5-triazin-2-(1H)-
onate[2-(1-O2',O3')-, T-4]- (9CI) (CA INDEX NAME)
MF C16 H24 B N8 O10
CI CCS, COM
SR CA
```



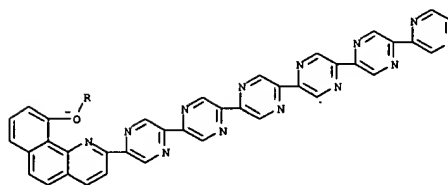
PAGE 1-A



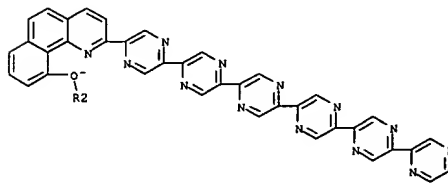
PAGE 2-A



PAGE 3-A



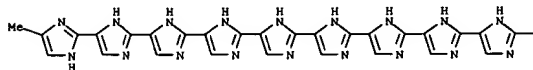
PAGE 4-A



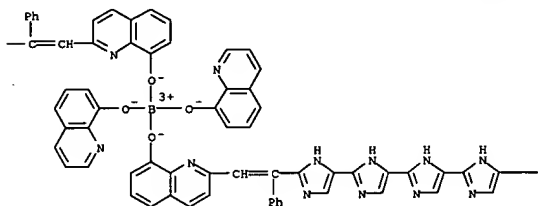


L11 ANSWER 7 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN (Continued)

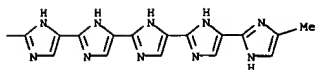
PAGE 1-A



PAGE 1-B



PAGE 1-C



```

L11 ANSWER 8 OF 23  REGISTRY  COPYRIGHT 2006 ACS ON STN
RN  780750-08-5  REGISTRY
ED  Entered STN:  15 Nov 2004
CN  Borate(1-),
tetraakis[4,1,1'-dimethyl-3,3',4',4',5',5'-pentaphenyl[2,2'-bi-1H-
pyrrolyl-5-yl]-8-quinolinolato-oO8]- (9CI)  (CA INDEX NAME)
MF  C196 H144 B N12 O4
SI  CCS, COM
CR  CA.

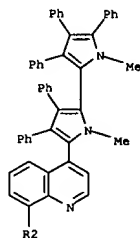
```

```

LN1 ANSWER 9 OF 23 REGISTRY COPYRIGHT 2006 ACS ON STN
RN 778571-66-7 REGISTRY
ED Entered STN: 11 Nov 2004
CN Borate(1-),
tetraakis[2,5-(4-nitrophenyl)[2,5':2',5'':2'',5'''
''-quinquethiazol-2''''-yl]ethenyl]-8-quinolinolato-κO8]- (9CI)
(CA INDEX NAME)
MF C128 H64 B N28 O12 S20
CI CCS, COM
SR CB

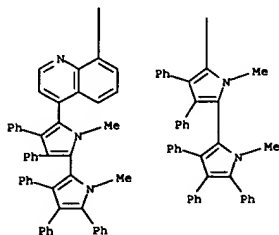
```

PAGE 1-A

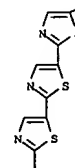
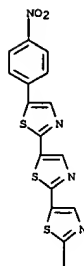


\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

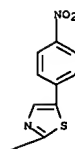
PAGE 3-A

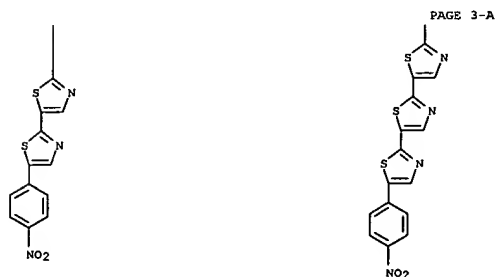
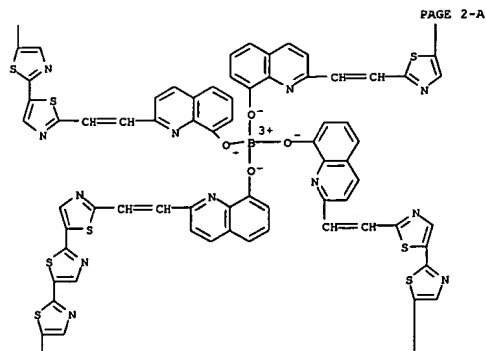


PAGE 1-A

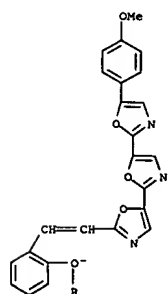
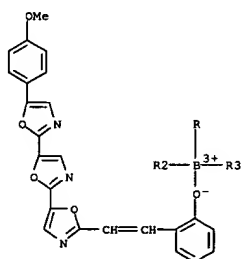


PAGE 1-B

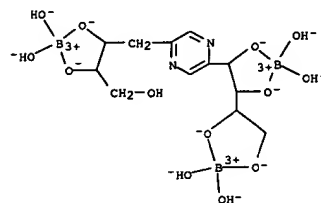




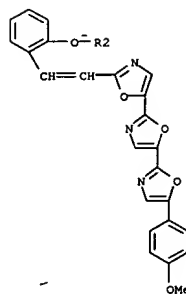
L11 ANSWER 11 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 772335-27-0 REGISTRY  
 ED Entered STN: 31 Oct 2004  
 CN Borate(1-),  
 tetrakis[2-[2-[5-(4-methoxyphenyl)](2,5':2',5''-teroxazol)-2''-yl]ethenylphenolato- $\kappa$ O]- (9CI) (CA INDEX NAME)  
 MF C96 H64 B N12 O20  
 CI CCS, COM  
 SR CA



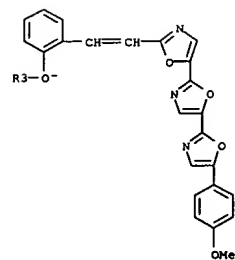
L11 ANSWER 10 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 777846-21-6 REGISTRY  
 ED Entered STN: 10 Nov 2004  
 CN Borate(3-), hexahydroxy[ $\mu$ 3-{(1R,2S,3R)-1-{5-[(2S,3R)-2,3-di(hydroxy- $\kappa$ O)-4-hydroxybutyl]pyrazinyl}-1,2,3,4-butanetetrolato(6-)- $\kappa$ O1, $\kappa$ O2: $\kappa$ O3, $\kappa$ O4}]tri- (9CI) (CA INDEX NAME)  
 MF C12 H20 B3 N2 O13  
 CI CCS, COM  
 SR CA



PAGE 3-A

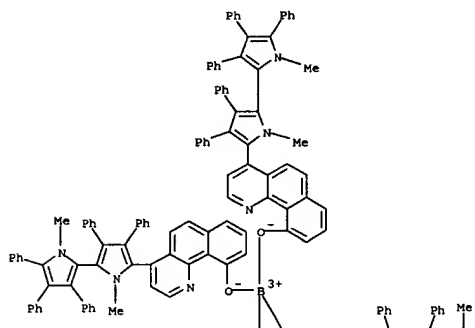


PAGE 4-A



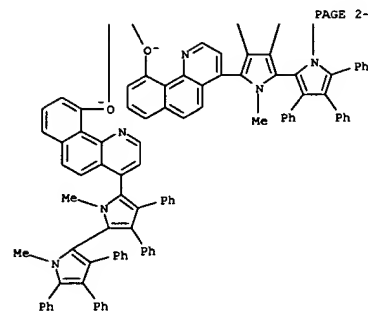
L11 ANSWER 12 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 749844-94-8 REGISTRY  
 ED Entered STN: 23 Sep 2004  
 CN Borate(1-),  
 tetrakis[4-(1,1'-dimethyl-3,3',4,4',5'-pentaphenyl[2,2'-bi-1H-  
 pyrrol]-5-yl)benzo[h]quinolin-10-olato-κO10]- (9CI) (CA INDEX NAME)  
 MF C212 H152 B N12 O4  
 CI CCS, COM  
 SR CA

PAGE 1-A



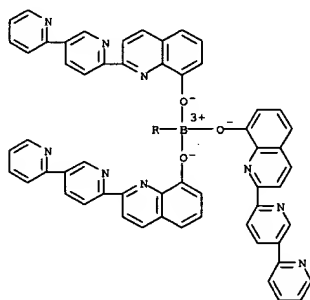
L11 ANSWER 12 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN (Continued)

PAGE 2-A

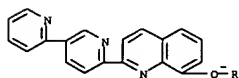


L11 ANSWER 13 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 741667-63-0 REGISTRY  
 ED Entered STN: 09 Sep 2004  
 CN Borate(1-), tetrakis(2-[2,3'-bipyridin]-5'-yl-8-quinolinolato-κO8)-  
 (9CI) (CA INDEX NAME)  
 MF C76 H48 B N12 O4  
 CI CCS, COM  
 SR CA

PAGE 1-A

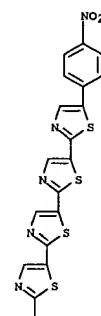


PAGE 2-A

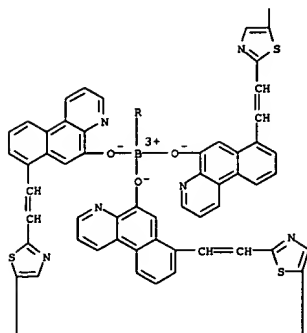


L11 ANSWER 14 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 741246-32-2 REGISTRY  
 ED Entered STN: 08 Sep 2004  
 CN Borate(1-),  
 tetrakis[7-[2-[5-(4-nitrophenyl)[2,5':2',5'':2'',5''':2''',5''  
 ''-quinoxethiazol]-2''''-yl]ethenyl]benzo[f]quinolin-5-olato-κO5]-  
 (9CI) (CA INDEX NAME)  
 MF C144 H72 B N28 O12 S20  
 CI CCS, COM  
 SR CA

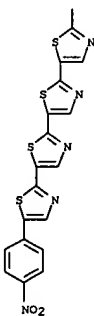
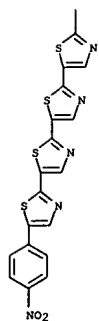
PAGE 1-A



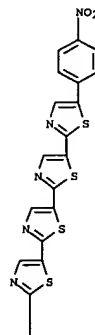
PAGE 2-A



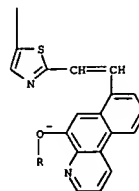
PAGE 3-A



PAGE 4-A

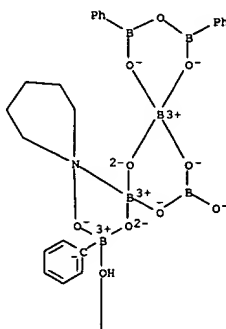


PAGE 5-A



L11 ANSWER 15 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 737749-88-1 REGISTRY  
 ED Entered STN: 02 Sep 2004  
 CN Borate(2-), [μ-[1-(hydroxy-κO)piperidinato-κN]] [1-(hydroxy-κO)piperidine] [μ-[orthoborate(3-)-κO:κO']] di-μ-oxophenyl [(phenylboronic acid-κO) bimol. monoanhydrido(2-)) tri-(9CI) (CA INDEX NAME)  
 MF C28 H36 B6 N2 O10  
 CI CCS, COM  
 SR CA

PAGE 1-A

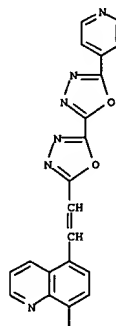


PAGE 2-A

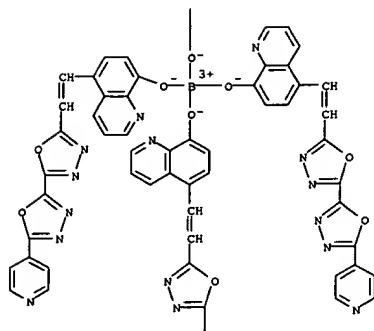


L11 ANSWER 16 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 733735-50-7 REGISTRY  
 ED Entered STN: 27 Aug 2004  
 CN Borate(1-), tetrakis[5-[2-[5'-(4-pyridinyl)[2,2'-bi-1,3,4-oxadiazol]-5-yl]ethenyl]-8-quinolinolato-κO8]- (9CI) (CA INDEX NAME)  
 MF C80 H44 B N24 O12  
 CI CCS, COM  
 SR CA

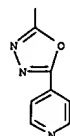
PAGE 1-A



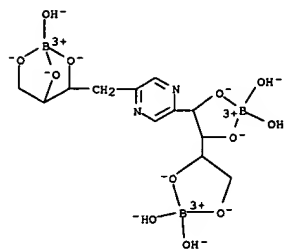
PAGE 2-A



PAGE 3-A



L11 ANSWER 17 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 689215-18-7 REGISTRY  
 ED Entered STN: 03 Jun 2004  
 CN Borate(3-), pentahydroxy[μ3-[(1R,2S,3R)-1-[5-[(2S,3R)-2,3,4-tri(hydroxy-  
 κO)butyl]pyrazinyl]-1,2,3,4-butanetetrolato(7-)]-  
 κO1,κO2:κO3,κO4]]tri- (9CI) (CA INDEX NAME)  
 MF C12 H18 B3 N2 O12  
 CI CCS, COM  
 SR CA



L11 ANSWER 18 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 433330-51-9 REGISTRY  
 ED Entered STN: 25 Jun 2002  
 CN Borate(2-), [μ-[1-(hydroxy-κO)piperidinato-κN]] [1-(hydroxy-  
 κO)piperidine] [μ-[orthoborato(3-)-κO:κO']] di-μ-  
 oxophenyl[(phenylboronic acid-κO) bimol. monoanhydridato(2-)] tri-,  
 dihydrogen, compd. with 1-hydroxypiperidine (1:1) (9CI) (CA INDEX NAME)  
 MF C28 H36 B6 N2 O10 . C5 H11 N O . 2 H  
 CI COM  
 SR CA

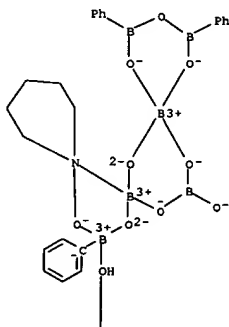
CM 1

CRN 433330-50-8 (737749-88-1)  
 CMF C28 H36 B6 N2 O10 . 2 H  
 CCI CCS

L11 ANSWER 18 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN (Continued)  
 CM 2  
 CRN 4801-58-5  
 CMF C5 H11 N O



PAGE 1-A

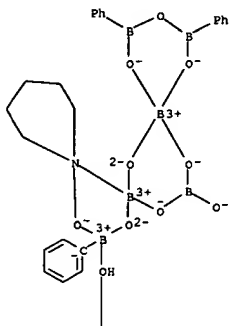


PAGE 2-A

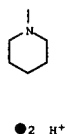


● 2 H<sup>+</sup>

L11 ANSWER 19 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 433330-50-8 REGISTRY  
 ED Entered STN: 25 Jun 2002  
 CN Borate(2-), [ $\mu$ -{1-(hydroxy- $\kappa$ O)piperidinato- $\kappa$ N}] [1-(hydroxy- $\kappa$ O)piperidine] [ $\mu$ -{orthoborato(3-)- $\kappa$ O: $\kappa$ O'}] di- $\mu$ -oxophenyl[(phenylboronic acid- $\kappa$ O) bimol. monohydrato(2-)] tri-, dihydrogen (9CI) (CA INDEX NAME)  
 MF C28 H36 B6 N2 O10 . 2 H  
 CI CCS, COM  
 SR CA  
 CRN (737749-88-1)

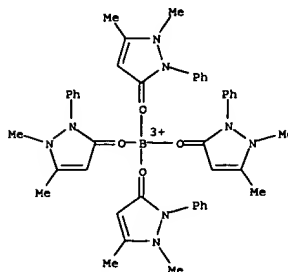


PAGE 1-A

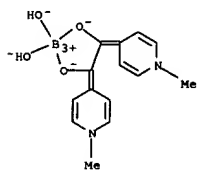


PAGE 2-A

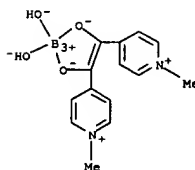
L11 ANSWER 20 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 84663-12-7 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Boron(3+), tetrakis(1,2-dihydro-1,5-dimethyl-2-phenyl-3H-pyrazol-3-one-O)-, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 3H-Pyrazol-3-one, 1,2-dihydro-1,5-dimethyl-2-phenyl-, boron complex  
 MF C44 H48 B N8 O4  
 CI CCS, COM



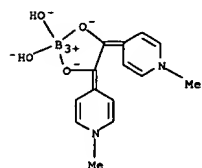
L11 ANSWER 21 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 51095-90-0 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Borate(1-), [1,2-bis(1-methyl-4(1H)-pyridinylidene)-1,2-ethanediolato(2-)-O,O'] dihydroxy-, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1,2-Ethanediol, 1,2-bis(1-methyl-4(1H)-pyridinylidene)-, boron complex  
 MF C14 H16 B N2 O4  
 CI CCS, COM



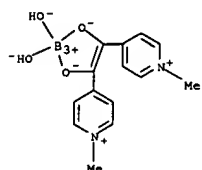
L11 ANSWER 22 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 51095-89-7 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Boron(1+), [[4,4'-(1,2-dihydroxy-1,2-ethenediyl)bis[1-methylpyridiniumato]](2-)-O,O'] dihydroxy-, (T-4)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Pyridinium, 4,4'-(1,2-dihydroxy-1,2-ethenediyl)bis[1-methyl-, boron complex  
 MF C14 H16 B N2 O4  
 CI CCS, COM



L11 ANSWER 23 OF 23 REGISTRY COPYRIGHT 2006 ACS on STN  
 RN 6985-01-9 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Boron(1+), {[4,4'-(1,2-dihydroxy-1,2-ethenediyl)bis[1-methylpyridiniumato]](2-)-O,O'}dihydroxy-, (T-4),  
 (T-4)-[1,2-bis(1-methyl-4(1H)-pyridinylidene)-1,2-ethanediolato(2-)-O,O'}dihydroxyborate(1-)  
 (9CI)  
 (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 1,2-Ethanediol, 1,2-bis(1-methyl-4(1H)-pyridinylidene)-, boron complex  
 CN Pyridinium, 4,4'-(1,2-dihydroxy-1,2-ethenediyl)bis[1-methyl-, boron complex  
 MF C14 H16 B N2 O4 . C14 H16 B N2 O4  
 CM 1  
 CRN 51095-90-0  
 CMF C14 H16 B N2 O4  
 CCI CCS



CM 2  
 CRN 51095-89-7  
 CMF C14 H16 B N2 O4  
 CCI CCS



=> fil caplus  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
256.56	256.77

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 09:16:22 ON 09 MAR 2006  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 9 Mar 2006 VOL 144 ISS 11  
FILE LAST UPDATED: 8 Mar 2006 (20060308/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> d his

(FILE 'HOME' ENTERED AT 09:13:16 ON 09 MAR 2006)

FILE 'REGISTRY' ENTERED AT 09:13:25 ON 09 MAR 2006

L1	SCREEN 2040
L2	STRUCTURE UPLOADED
L3	QUE L2 AND L1
L4	SCREEN 2040
L5	STRUCTURE UPLOADED
L6	QUE L5 AND L4
L7	50 S L6
L8	6459 S L6 FULL
L9	208 S L3 FULL SUB=L8
L10	185 S L9 AND CAPLUS/LC
L11	23 S L9 NOT L10

FILE 'CAPLUS' ENTERED AT 09:16:22 ON 09 MAR 2006

=> s l10

L12 105 L10

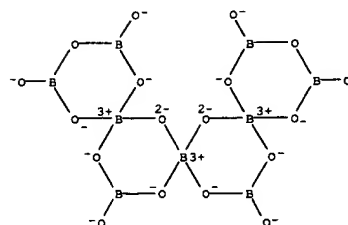
=> d ibib abs hitstr 1-105



L12 ANSWER 1 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:980559 CAPLUS  
DOCUMENT NUMBER: 144:12416  
TITLE: Thermochemistry of triimidazolium nonaborate  
AUTHOR(S): Liu, Zhi-Hong; Zhang, Wen-Juan  
CORPORATE SOURCE: School of Chemistry and Materials Science, Shaanxi Normal University, Xi'an, 710062, Peop. Rep. China  
SOURCE: Thermochemica Acta (2005), 436(1-2), 156-158  
CODEN: THACAS; ISSN: 0040-6031  
PUBLISHER: Elsevier B.V.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The crystalline triimidazolium nonaborate [C3H5N2]3[B9O12(OH)6] has been prepared and identified by XRD, TG, elemental anal., and chemical anal. The molar enthalpy of solution of [C3H5N2]3[B9O12(OH)6] in 0.9996 mol dm<sup>-3</sup> HCl(aq) and of imidazole in (HCl + H3BO3) (aq) were determined. With the incorporation of the enthalpies of solution of H3BO3 in HCl(aq), and the standard molar enthalpies of formation of C3H4N2(s), H3BO3(s), and H2O(l), the standard molar enthalpy of formation of -7116 ± 7 kJ mol<sup>-1</sup> of [C3H5N2]3[B9O12(OH)6] was obtained.  
IT 273750-78-0  
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)  
(enthalpy of formation of triimidazolium nonaborate from solution calorimetry)  
RN 273750-78-0 CAPLUS  
CN Borate(9-), bis[μ-[orthoborate(3-)-κO:κO']]di-μ-oxobis[μ-oxotetraoxodiborate(4-)]tri-, nonahydrogen, compd. with 1H-imidazole (1:9) (9CI) (CA INDEX NAME)  
CM 1  
CRN 273750-76-8  
CMF B9 O18 . 9 H  
CCI CCS

L12 ANSWER 1 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● 9 H<sup>+</sup>

CM 2  
CRN 288-32-4  
CMF C3 H4 N2



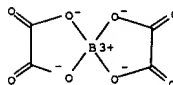
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS  
FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L12 ANSWER 2 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN

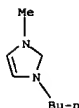
ACCESSION NUMBER: 2005:491174 CAPLUS  
DOCUMENT NUMBER: 144:157759  
TITLE: Tailor-made ionic liquids  
AUTHOR(S): Jork, C.; Kristen, C.; Pieraccini, D.; Stark, A.; Chlappe, C.; Beste, Y. A.; Arlt, W.  
CORPORATE SOURCE: Institut fuer Verfahrenstechnik, Fachgebiet Thermodynamik und Thermische Verfahrenstechnik, Technische Universitaet Berlin, Berlin, 10623, Germany  
SOURCE: Journal of Chemical Thermodynamics (2005), 37(6), 537-558  
CODEN: JCTDAF; ISSN: 0021-9614  
PUBLISHER: Elsevier Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB This article presents a first consequent thermodyn. optimization of ionic liqs. (IL) as entrainers in the separation upon distillation of both an azeotropic aqueous (THF + water) and a close-boiling aromatic test system (methylcyclohexane + toluene) on the basis of COSMO-RS predictions. The use of this method allows for the preselection from the large pool of available IL. Thus, favorable structural variations were identified and used for tailoring IL entrainers. For the prediction of activity coeffs. with COSMO-RS, the use of different conformations of the components, derived from conformational analyses, leads to varying results. The simulations showed that the influence of conformations of the volatile components and the ionic liqs. depends largely on the type of the phase equilibrium, which is investigated.  
The approach to tailor ionic liqs. as additives for separation science starts with the prediction of the activity coeffs. at infinite dilution. The simulation indicated that a higher degree of branching or longer alkyl substituents on the cation, as well as a low nucleophilicity of the anion decreases both selectivity and capacity in the polar test mixture.  
However, COSMO-RS calcs. for the non-polar mixture showed that the selection of an entrainer for this system is more complicated, because - contrarily to (THF + water) - structural variations of the IL entrainer cause converse changes in selectivity and capacity: while the selectivity for toluene increases with a lower degree of branching and a shorter alkyl substituent of the cation as well as with a lower nucleophilicity of the anion, these properties decrease the capacity. In this work, the most favorable IL entrainers were synthesized and the separation factors of the test systems were exptl. validated at finite dilution.  
IT 566135-35-1P  
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
(Phase equilibrium and constituent activity in water/organic solvent/ionic liquid binary and ternary mixts.)  
RN 566135-35-1 CAPLUS  
CN 1H-imidazolium, 1-butyl-3-methyl-, (7-4)-bis[ethanedioato(2-)-κO1,κO2]borate(1-) (9CI) (CA INDEX NAME)

L12 ANSWER 2 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CM 1  
CRN 125579-65-9  
CMF C4 B O8  
CCI CCS

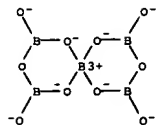


CM 2  
CRN 80432-08-2  
CMF C8 H15 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS  
FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

CRN 92258-67-8  
CMF B5 010 . 5 H  
CCI CCS

● 5 H<sup>+</sup>

CM 2

CRN 110-89-4  
CMF C5 H11 N

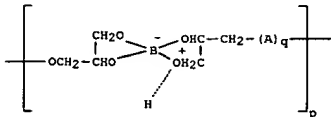
L12 ANSWER 5 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2005:267909 CAPLUS  
 DOCUMENT NUMBER: 143:18668  
 TITLE: Synthesis of elliptical vanadoborates housing bimetallic centers [Zn<sub>4</sub>(B<sub>2</sub>O<sub>4</sub>H<sub>2</sub>)(V<sub>10</sub>B<sub>2</sub>O<sub>7</sub>4H<sub>8</sub>)]<sub>8</sub>- and [Mn<sub>4</sub>(C<sub>2</sub>O<sub>4</sub>)(V<sub>10</sub>B<sub>2</sub>O<sub>7</sub>4H<sub>8</sub>)]<sub>10</sub>-  
 AUTHOR(S): Wu, Mingmei; Law, Teresa S-C.; Sung, Herman H-Y.; Cai,  
 Jiwen; Williams, Ian D.  
 CORPORATE SOURCE: Department of Chemistry, Hong Kong University of Science and Technology, Hong Kong, Peop. Rep. China  
 SOURCE: Chemical Communications (Cambridge, United Kingdom) (2005), (14), 1827-1829  
 CODEN: CHCOFS; ISSN: 1359-7345  
 PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 143:18668  
 AB The hydrothermal preparation and crystal structures of 3 new vanadoborate compds. with elliptical (V<sub>10</sub>B<sub>2</sub>O<sub>7</sub>4H<sub>8</sub>) clusters, [Zn(en)<sub>2</sub>]Z [Zn(OH<sub>2</sub>)(en)]<sub>4</sub> [Zn<sub>4</sub>(B<sub>2</sub>O<sub>4</sub>H<sub>2</sub>)(BO<sub>3</sub>H)<sub>2</sub>(V<sub>10</sub>B<sub>2</sub>O<sub>7</sub>4H<sub>8</sub>)]·10H<sub>2</sub>O (1), K<sub>6</sub>(H<sub>3</sub>O)<sub>8</sub>[Mn<sub>4</sub>(C<sub>2</sub>O<sub>4</sub>)(V<sub>10</sub>B<sub>2</sub>O<sub>7</sub>4H<sub>8</sub>)(B<sub>4</sub>O<sub>9</sub>H<sub>2</sub>)]·24H<sub>2</sub>O (2), and (H<sub>3</sub>O)<sub>14</sub>[Mn<sub>4</sub>(C<sub>2</sub>O<sub>4</sub>)(V<sub>10</sub>B<sub>2</sub>O<sub>7</sub>4H<sub>8</sub>)]·32H<sub>2</sub>O (3) is described. The clusters contain pairs of bimetallic Zn<sub>2</sub> or Mn<sub>2</sub> units.  
 IT 852461-51-9P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and crystal structure of 2-dimensional polymeric)  
 RN 852461-51-9 CAPLUS  
 CN Vanadate(10-), (di-μ-hydroxydiborate)bis[μ<sub>4</sub>-[hexakis[μ-orthoborato(3-)-κO:κO']hexa-μ-oxo-octaooctaborato(22-)]di-μ-oxodi-μ<sub>3</sub>-oxo[tetraquaooctakis(1,2-ethanediamine-κN,κN')]bis[μ-orthoborato(3-)-κO:κO']decazincatetradeca-, decahydrogen, decahydrate (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
 REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE  
 FORMAT

L12 ANSWER 6 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:841950 CAPLUS  
 DOCUMENT NUMBER: 141:358096  
 TITLE: Ink-jet recording media with high ink absorbability and providing high-resolution water-resistant images  
 INVENTOR(S): Ito, Kengo; Uehara, Masaharu  
 PATENT ASSIGNEE(S): Sony Corp., Japan; Boron International K. K.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JIKXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004284085	A2	20041014	JP 2003-76600	20030319
PRIORITY APPLN. INFO.:			JP 2003-76600	20030319

GI



I

AB In the media, ink-receiving layers formed on substrates contain binders capable of forming chemical bonds with the boron compds. and fillers, the surface of which are modified with semipolar organic boron compds. Preferably, the boron compds. are expressed by I [A = XI-Yn-Zn; X, Z = CS100 oxygen-containing hydrocarbyl bearing ether terminal group; Y = OCORCO; R = C1-34 hydrocarbyl; 1, m, n = 0, 1; P = 10-1000; q ≥ 1] or their deriva.  
 IT 773868-49-8

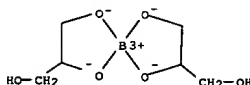
RL: TEM (Technical or engineered material use); USES (Uses) (coating on filler; ink-jet recording medium containing organoboron-surface-modified filler and binder forming chemical bond with organoboron)

RN 773868-49-8 CAPLUS

CN Borate(1-), bis[1,2,3-propanetriolato(2-)-κO1,κO2]-, hydrogen, (T-4)-, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 49625-59-4

CMF C6 H12 B O6 . H  
CCI CCS● H<sup>+</sup>

CM 2

CRN 88-12-0  
CMF C6 H9 N O

CRN 120-80-9  
CMF C6 H6 O2

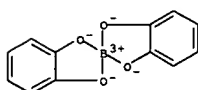


CM 3

CRN 108-89-4  
CMF C6 H7 N

IT 219702-48-4  
RL: PRP (Properties)  
(preparation and 11B NMR of)  
RN 219702-48-4 CAPLUS  
CN Borate(1-), bis[1,2-benzenediolato(2-)-κO,κO']-, (T-4)-, hydrogen, compd. with 4-methylpyridine (1:1) (9CI) (CA INDEX NAME)

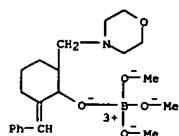
CM 1

CRN 22450-98-2  
CMF C12 H8 B O4 . H  
CCI CCS● H<sup>+</sup>

CM 2

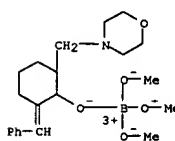
CRN 108-89-4  
CMF C6 H7 N

L12 ANSWER 9 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2004:401384 CAPLUS  
DOCUMENT NUMBER: 141:206835  
TITLE: Diastereoselective reduction of cyclic bioactive Mannich ketones  
AUTHOR(S): Lorand, Tamas; Osz, Erzsébet; Kispál, Gyula; Nagy, Gergely; Weckert, Edgar; Luebbert, Daniel; Meents, Alke; Kocsis, Bela; Prokai, Laszlo  
CORPORATE SOURCE: Faculty of Medicine, Department of Biochemistry and Medical Chemistry, University Pecs, Pecs, H-7601, Hung.  
SOURCE: ARKIVOC (Gainesville, FL, United States) (2004), (7), 34-52  
CODEN: AGFVAR  
URL: <http://www.arkat-usa.org/ark:/journal/2004/Antus/S-A-837B/837B.pdf>  
PUBLISHER: Arkat USA Inc.  
DOCUMENT TYPE: Journal; (online computer file)  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 141:206835  
AB The reduction of cyclic Mannich ketones having antibacterial activity showed poor stereoselectivity with L-Selectride, sodium trimethoxyborohydride and diisobutylaluminum hydride, while lithium aluminum hydride and, in particular, sodium borohydride often yielded a single stereoisomer. The size of the ring strongly influenced the stereocomposition of the reaction mixts. An increased preference for the trans isomer was attributed to a weak intramol. hydrogen bond between the OH and the N, as demonstrated by X-ray crystallog. After reduction, the antibacterial activity of the product decreased dramatically ("S-form") but was not completely abolished in deep rough mutants of Gram-neg. bacteria.  
IT 741725-62-2 742077-99-2  
RL: PRP (Properties)  
(calculated heat of formation of intermediates from diastereoselective reduction of cyclic Mannich Ketones)  
RN 741725-62-2 CAPLUS  
CN Borate(1-), trimethoxy[rel-(1R,2S,6E)-2-(4-morpholinylmethyl)-6-(phenylmethylene)cyclohexanolato-κO]-, sodium, (T-4)- (9CI) (CA INDEX NAME)

● Na<sup>+</sup>

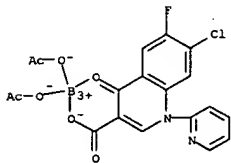
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
FORMAT

RN 742077-99-2 CAPLUS  
CN Borate(1-), trimethoxy[rel-(1R,2R,6E)-2-(4-morpholinylmethyl)-6-(phenylmethylene)cyclohexanolato-κO]-, sodium, (T-4)- (9CI) (CA INDEX NAME)

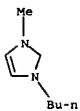
● Na<sup>+</sup>

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
FORMAT

L12 ANSWER 10 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:253357 CAPLUS  
 DOCUMENT NUMBER: 141:106352  
 TITLE: Synthesis and antibacterial activity of N-pyridine quinolone derivative  
 AUTHOR(S): Wang, Dun-jia; Huang, Ling  
 CORPORATE SOURCE: Department of Chemistry and Environmental Engineering, Hubei Normal University, Huangshi, 435002, Peop. Rep. China  
 SOURCE: Huaxue Shiji (2004), 26(1), 47-49  
 CODEN: HUSHDR; ISSN: 0258-3283  
 PUBLISHER: Huagongbu Huaxue Shiji Xinsizhan  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 OTHER SOURCE(S): CASREACT 141:106352  
 AB 1-(2-Pyridyl)-7-chloro-6-fluoro-1,4-dihydro-4-oxo-7-(1-piperazinyl)quinoline-3-carboxylic acid (I) was synthesized from 2,4-dichloro-5-fluoroacetophenone through  $\beta$ -keto-ester formation, condensation with tri-Et orthoformate, substitution with 2-aminopyridine, cyclization, chelation with boric acid in acetic anhydride and followed by nucleophilic substitution reaction with piperazine. The total yield was 39.3%. The in vitro antibacterial activity of I against S. aureus and E. coli was tested.  
 IT 717910-04-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis and antibacterial activity of N-pyridine quinolone derivative)  
 RN 717910-04-8 CAPLUS  
 CN Boron, bis(acetato- $\kappa$ O) [7-chloro-6-fluoro-1,4-dihydro-4-(oxo- $\kappa$ O)-1-(2-pyridinyl)-3-quinolinecarboxylato- $\kappa$ O3]-, (T-4)- (9CI) (CA INDEX NAME)

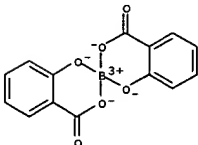


L12 ANSWER 11 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



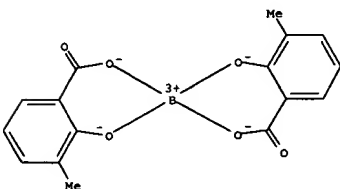
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2  
 CRN 38403-08-6  
 CMF C14 H8 B O6  
 CCI CCS



RN 642485-74-3 CAPLUS  
 CN 1H-Imidazolium, 1-butyl-3-methyl-, (T-4)-bis[2-(hydroxy- $\kappa$ O)-3-methylbenzoato(2-)- $\kappa$ O]borate(1-), (9CI) (CA INDEX NAME)

CM 1  
 CRN 258875-08-0  
 CMF C16 H12 B O6  
 CCI CCS



L12 ANSWER 11 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:39482 CAPLUS  
 DOCUMENT NUMBER: 140:94138  
 TITLE: Ionic liquids containing borate or phosphate anions  
 INVENTOR(S): Moulton, Roger  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 10 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004007693	A1	20040115	US 2002-188452	20020703
WO 2004005222	A2	20040115	WO 2003-US21125	20030703
WO 2004005222	A3	20040923		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LA, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-188452 A 20020703

OTHER SOURCE(S): CASREACT 140:94138; MARPAT 140:94138  
 AB The present invention relates to novel ionic liqs. comprising a phosphate or borate anion. The ionic liqs. were prepared via metathesis or via a reaction between boric or phosphoric acid with metal hydroxide and an alc.

Thus, reaction of LiOH with boric acid in the presence of 3-methylsalicylic acid in water gave 70% lithium bis(3-methylsalicylyl)borate which on treatment with 1-butyl-3-methylimidazolium chloride in water gave 50% title ionic liquid, 1-butyl-3-methylimidazolium bis(3-methylsalicylyl)borate.

IT 625835-88-3P 642485-74-3P 642485-89-0P  
 642485-99-2P 642486-04-2P 642486-27-9P  
 642486-33-7P 642486-38-2P

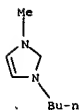
RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of ionic liqs. containing borate or phosphate anions)

RN 625835-88-3 CAPLUS  
 CN 1H-Imidazolium, 1-butyl-3-methyl-, (T-4)-bis[2-(hydroxy- $\kappa$ O)benzoato(2-)- $\kappa$ O]borate(1-), (9CI) (CA INDEX NAME)

CM 1  
 CRN 80432-08-2  
 CMF C8 H15 N2

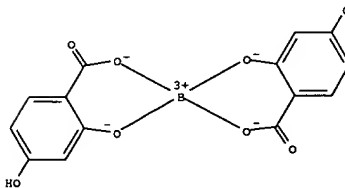
L12 ANSWER 11 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CM 2  
 CRN 80432-08-2  
 CMF C8 H15 N2

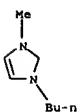


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RN 642485-89-0 CAPLUS  
 CN 1H-Imidazolium, 1-butyl-3-methyl-, (T-4)-bis[2-(hydroxy- $\kappa$ O)-4-hydroxybenzoato(2-)- $\kappa$ O]borate(1-), (9CI) (CA INDEX NAME)

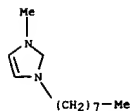
CM 1  
 CRN 642485-88-9  
 CMF C14 H8 B O8  
 CCI CCS



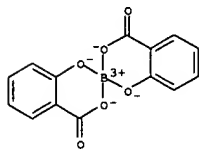
CM 2  
 CRN 80432-08-2  
 CMF C8 H15 N2



L12 ANSWER 11 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RN 642485-99-2 CAPLUS  
 CN 1H-Imidazolium, 1-methyl-3-octyl-, (T-4)-bis[2-(hydroxy-  
 κO)benzoato(2-)-κO]borate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 178631-03-3  
 CMF C12 H23 N2



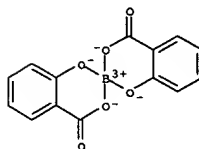
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 CM 2  
 CRN 38403-08-6  
 CMF C14 H8 B O6  
 CCI CCS



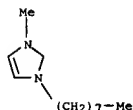
RN 642486-04-2 CAPLUS  
 CN 1H-Imidazolium, 1-dodecyl-3-methyl-, (T-4)-bis[2-(hydroxy-  
 κO)benzoato(2-)-κO]borate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 46928-10-3  
 CMF C16 H31 N2

L12 ANSWER 11 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 Me  
  
 (CH<sub>2</sub>)<sub>11</sub>-Me

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 CM 2  
 CRN 38403-08-6  
 CMF C14 H8 B O6  
 CCI CCS

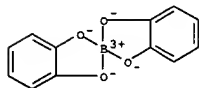


RN 642486-27-9 CAPLUS  
 CN 1H-Imidazolium, 1-methyl-3-octyl-, (T-4)-bis[1,2-benzenediolato(2-)-  
 κO,κO']borate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 178631-03-3  
 CMF C12 H23 N2

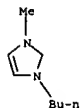


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 CM 2  
 CRN 16986-25-7  
 CMF C12 H8 B O4  
 CCI CCS

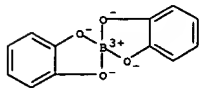
L12 ANSWER 11 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 642486-33-7 CAPLUS  
 CN 1H-Imidazolium, 1-butyl-3-methyl-, (T-4)-bis[1,2-benzenediolato(2-)-  
 κO,κO']borate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 80432-08-2  
 CMF C8 H15 N2

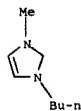


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 CM 2  
 CRN 16986-25-7  
 CMF C12 H8 B O4  
 CCI CCS

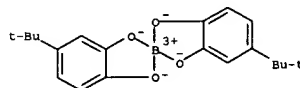


RN 642486-38-2 CAPLUS  
 CN 1H-Imidazolium, 1-butyl-3-methyl-, (T-4)-bis[4-(1,1-dimethylethyl)-1,2-  
 benzenediolato(2-)-κO,κO']borate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 80432-08-2  
 CMF C8 H15 N2

L12 ANSWER 11 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 CM 2  
 CRN 53992-96-4  
 CMF C20 H24 B O4  
 CCI CCS



L12 ANSWER 12 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:892313 CAPLUS  
 DOCUMENT NUMBER: 139:352743  
 TITLE: Primary lithium batteries  
 INVENTOR(S): Munshi, M. Zafar A.; Coowar, Fazlil  
 PATENT ASSIGNEE(S): Lithium Power Technologies, Inc., USA  
 SOURCE: U.S. Pat. Appl. Publ., 6 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003211383	A1	20031113	US 2002-142266	20020509
PRIORITY APPLN. INFO.: US 2002-142266 20020509				

AB A thermal battery for operation at temps. below about 250° and preferably not above about 200° includes a primarily CFX cathode, an electrolyte, and a lithium-based anode. The electrolyte is an organo borate lithium salt or an ionically conductive solid polymer electrolyte.

IT 618446-94-9  
 RL: DEV (Device component use); USES (Uses)  
 (primary lithium thermal batteries)

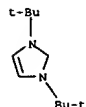
RN 618446-94-9 CAPLUS

CN 1H-Imidazolium, 1,3-bis(1,1-dimethylethyl)-, (T-4)-bis[ethanedioato(2-)-  
 κO1,κO2]borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 199382-55-3

CMF C11 H21 N2



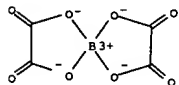
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 125579-65-9

CMF C4 B O8

CCI CCS



L12 ANSWER 13 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:758951 CAPLUS  
 DOCUMENT NUMBER: 139:400500  
 TITLE: Ionic Liquids of Chelated Orthoborates as Model Ionic Glassformers  
 AUTHOR(S): Xu, Wu; Wang, Li-Min; Nieman, Ronald A.; Angell, C. Austen  
 CORPORATE SOURCE: Department of Chemistry and Biochemistry, Arizona State University, Tempe, AZ, 85287-1604, USA  
 SOURCE: Journal of Physical Chemistry B (2003), 107(42), 11749-11756  
 CODEN: JPCBPK; ISSN: 1520-6106  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Ionic liqs. based on various chelated orthoborate anions of different N-containing onium cations have been synthesized using an economic synthesis strategy. Most orthoborates do not crystallize. They are found to have much higher glass transition temps. and room-temperature viscosities than those with perfluorinated anions such as TFSI-, BF4-, and CF3SO3- (Tf-), as predicted from anion polarizability arguments. The ambient conductivities of the new ionic liqs. are low relative to those with perfluorinated anions. The transport properties all show that cohesion in these liqs. increases, and ionic mobilities decrease, as anion size increases, implying that van der Waals interactions, not Coulomb interactions, have become the controlling influence. In view of their resistance to crystallization, the large range of temperature over which these liqs. can be studied, their hydrophobic properties, and their high fragilities, these liqs. may provide good model systems for fundamental liquid state investigations and interesting solvents for large-mol. dissoln.

IT 566135-35-1P 625835-87-2P 625835-88-3P  
 625835-89-4P 625835-90-7P 625835-91-8P  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(ionic liqs. of chelated orthoborates as model ionic glass formers)  
 RN 566135-35-1 CAPLUS

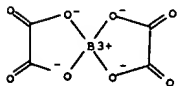
CN 1H-Imidazolium, 1-butyl-3-methyl-, (T-4)-bis[ethanedioato(2-)-  
 κO1,κO2]borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 125579-65-9

CMF C4 B O8

CCI CCS



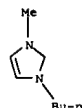
L12 ANSWER 12 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L12 ANSWER 13 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CM 2

CRN 80432-08-2

CMF C8 H15 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 625835-87-2 CAPLUS

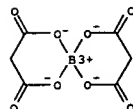
CN 1H-Imidazolium, 1-butyl-3-methyl-, (T-4)-bis[propanedioato(2-)-  
 κO1,κO3]borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 343783-57-3

CMF C6 H4 B O8

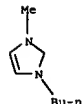
CCI CCS



CM 2

CRN 80432-08-2

CMF C8 H15 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 625835-88-3 CAPLUS

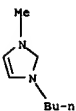
CN 1H-Imidazolium, 1-butyl-3-methyl-, (T-4)-bis[2-(hydroxy-



L12 ANSWER 13 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
K0benzoato(2-)-K0borate(1-) (9CI) (CA INDEX NAME)

CM 1

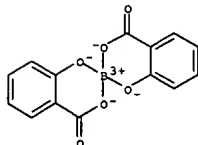
CRN 80432-08-2  
CMF C8 H15 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

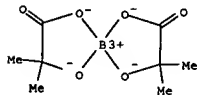
CRN 38403-08-6  
CMF C14 H8 B O6  
CCI CCS



RN 625835-89-4 CAPLUS  
CN 1H-Imidazolium, 1-butyl-3-methyl-, (T-4)-bis[2-(hydroxy-K0)-2-methylpropanoato(2-)-K0]borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 125579-63-7  
CMF C8 H12 B O6  
CCI CCS

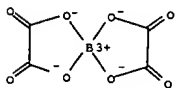


L12 ANSWER 13 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



CM 2

CRN 125579-65-9  
CMF C4 B O8  
CCI CCS



REFERENCE COUNT:  
THIS

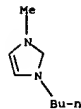
FORMAT

38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR  
RECORD. ALL CITATIONS AVAILABLE IN THE RE

L12 ANSWER 13 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CM 2

CRN 80432-08-2  
CMF C8 H15 N2

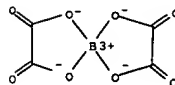


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 625835-90-7 CAPLUS  
CN Pyridinium, 1-butyl-, (T-4)-bis[ethanedioato(2-)-  
K01,K02]borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 125579-65-9  
CMF C4 B O8  
CCI CCS



CM 2

CRN 45806-95-9  
CMF C9 H14 N



RN 625835-91-8 CAPLUS  
CN Pyrrolidinium, 1-butyl-1-methyl-, (T-4)-bis[ethanedioato(2-)-  
K01,K02]borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 223437-10-3  
CMF C9 H20 N

L12 ANSWER 14 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN

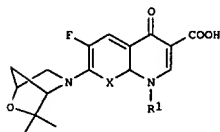
ACCESSION NUMBER: 2003:557902 CAPLUS  
DOCUMENT NUMBER: 140:217609

TITLE: Synthesis and antibacterial activity of  
7-[(1S,4S)-3,3-dimethyl-2-oxa-5-  
azabicyclo[2.2.1]heptane-5-yl]quinolones

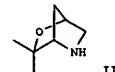
AUTHOR(S): Liu, Kaixiang; Guo, Huiyuan  
CORPORATE SOURCE: Institute of Medicinal Biotechnology, Chinese Academy  
of Medical Sciences and Peking Union Medical College,  
Beijing, 100050, Peop. Rep. China  
Zhongguo Yiyao Gongye Zazhi (2002), 33(6), 261-265

SOURCE: CODEN: ZYGZEA; ISSN: 1001-8255  
PUBLISHER: Zhongguo Yiyao Gongye Zazhi Bianjibu  
DOCUMENT TYPE: Journal

LANGUAGE: Chinese  
OTHER SOURCE(S): CASREACT 140:217609  
GI



I



II

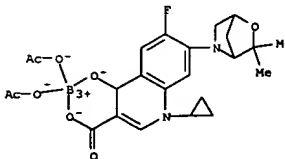
AB Three title compds. I (R1 = cyclopropyl, 2,4-difluorophenyl; X = C, N) were synthesized from trans-4-hydroxy-L-proline in eight steps to obtain an intermediate II, further substitution reaction of quinolone derivs., provide the title products. Their MICs against sixteen clin. isolates were detected. The results showed that they had very low antibacterial activities compared to ciprofloxacin and gatifloxacin.

IT 663605-48-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

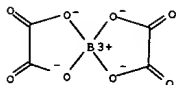
(synthesis of dimethylloxazabicycloheptanquinolones)

RN 663605-48-9 CAPLUS

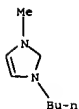
CN Borate(1-), bis(acetato-K0){1-cyclopropyl-7-[(1S,4S)-3,3-dimethyl-2-oxa-5-azabicyclo[2.2.1]hept-5-yl]-6-fluoro-1,4-dihydro-4-(hydroxy-K0)-3-quinolinecarboxylato(2-)-K03]-, (T-4)- (9CI) (CA INDEX NAME)



L12 ANSWER 15 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:418223 CAPLUS  
 DOCUMENT NUMBER: 139:139046  
 TITLE: Ionic Liquids: Ion Mobilities, Glass Temperatures, and Fragilities  
 AUTHOR(S): Xu, Wu; Cooper, Emanuel I.; Angell, C. Austen  
 CORPORATE SOURCE: Department of Chemistry and Biochemistry, Arizona State University, Tempe, AZ, 85287-1604, USA  
 SOURCE: Journal of Physical Chemistry B (2003), 107(25), 6170-6178  
 CODEN: JPCBFK; ISSN: 1520-6106  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB We combine old, unpublished data on ionic liqs. containing quaternary ammonium cations with new data on salts of aromatic cations containing a variety of anions, to demonstrate the existence for ionic liqs. of an unexpectedly wide range of liquid fragilities. The pattern is one now familiar for other liqs. Here, the pattern is important in determining the relative fluid properties at ambient temps. We find that the optimization of ionic liqs. for ambient temperature applications requiring low-vapor-pressure fluid phases involves the proper interplay of both cohesive energy and fragility factors. The cohesive energy is discussed in terms of the coulomb and van der Waals contributions to the attractive part of the pair potential. On the basis of the relation between the glass-transition temperature and the molar volume for salts with less-polarizable anions, we find evidence for a broad min. in the ionic liquid cohesive energy at an internuclear separation of ca. 0.6 nm. This min. lies between those of the BF<sub>4</sub><sup>-</sup> and TFSI<sup>-</sup> anions for the small quaternary ammonium cations of this study. The min. is expected to be narrower and less well-defined for salts with polarizable anions. The relation of fluidity to conductance is considered in terms of a Walden plot that is shown to provide a useful basis for organizing the observations on ionic liqs. and solns. Low vapor pressure and ideal Walden products are intimately related.  
 IT 566135-35-1  
 RL: FRP (Properties)  
 (Ion mobilities, glass temps., and fragilities of ionic liqs.)  
 RN 566135-35-1 CAPLUS  
 CN 1H-Imidazolium, 1-butyl-3-methyl-, (T-4)-bis[ethanedioato(2-)-κO1,κO2]borate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 125579-65-9  
 CHF C4 B O8  
 CCI CCS



CM 2

CRN 80432-08-2  
CHF C8 H15 N2

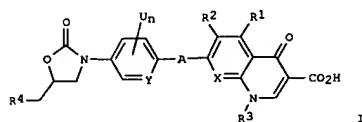
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 REFERENCE COUNT: 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

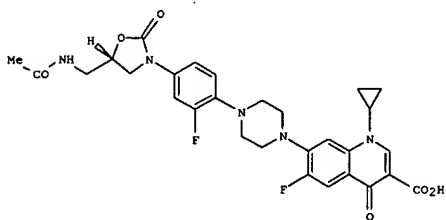
L12 ANSWER 16 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:319692 CAPLUS  
 DOCUMENT NUMBER: 138:338143  
 TITLE: Preparation of dual action bactericides comprising a oxazolidinone and a quinolone or naphthyridinone moiety effective against multi-drug resistant bacteria  
 INVENTOR(S): Hubschwerlen, Christian; Specklin, Jean-Luc  
 PATENT ASSIGNEE(S): Morphochem Aktiengesellschaft fuer Kombinatorische Chemie, Germany  
 SOURCE: PCT Int. Appl., 101 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003032962	A2	20030424	WO 2002-EP11163	20021004
WO 2003032962	A3	20030717		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, T2, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2460572	AA	20030424	CA 2002-2460572	20021004
EP 1432705	A2	20040630	EP 2002-796533	20021004
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK			
BR 2002013063	A	20040928	BR 2002-13063	20021004
US 2005096343	A1	20050505	US 2003-491519	20021004
JP 2005529061	T2	20050929	JP 2003-535766	20021004
NZ 531879	A	20051028	NZ 2002-531879	20021004
ZA 2004001909	A	20050309	ZA 2004-1909	20040309
PRIORITY APPLN. INFO.:			US 2001-327162P	P 20011004
			WO 2002-EP11163	W 20021004

OTHER SOURCE(S): MARPAT 138:338143  
 GI



I



II

AB The present invention relates to compds. of the Formula (I) that are useful antimicrobial agents and effective against a variety of multi-drug resistant bacteria. The present invention relates to oxazolidinones having a quinolone or naphthyridinone moiety (shown as I; variables defined below; e.g.

7-[4-[(5S)-5-(acetylaminoethyl)-2-oxoxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid (shown as II)) that are useful antibacterial agents and effective against a variety of multi-drug resistant bacteria. For I: A is a bond, NH, O, S, SO, SO<sub>2</sub>, SO<sub>2</sub>NH, PO<sub>4</sub>, -NH-CO-NH-, -CO-NH-, -CO-, -CO-O-, -NH-CO-O-, alkylene, alkenylene, alkynylene, heteroalkylene, arylene, heteroarylene, cycloalkylene, heterocycloalkylene, alkylarylene or heteroalkylarylene or a combination of two or more of these atoms or groups. X is CR<sub>5</sub> or N; Y is CR<sub>6</sub> or N; U is F or Cl; n = 0-3; R<sub>1</sub> is H, F, Cl, Br, I, OH, NH<sub>2</sub>, alkyl or heteroalkyl;

R<sub>2</sub> is H, F or Cl; R<sub>3</sub> is H, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroalkylaryl; R<sub>4</sub> is heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroalkylaryl; R<sub>5</sub> is H, F, Cl, OH, NH<sub>2</sub>, alkyl or heteroalkyl, or R<sub>3</sub> and R<sub>5</sub> can be linked via an alkylene, an alkenylene or heteroalkylene or be a part of a cycloalkylene or heterocycloalkylene group, in which case R<sub>3</sub> is not H and R<sub>5</sub> is not H, F, OH, NH<sub>2</sub> or Cl; R<sub>6</sub> is H, F, Cl or OMe. Although the methods of preparation are not claimed, 30 example preps. are included; the examples of this patent and many of the claims are the same as those of WO 03/031443 Al. All examples were tested

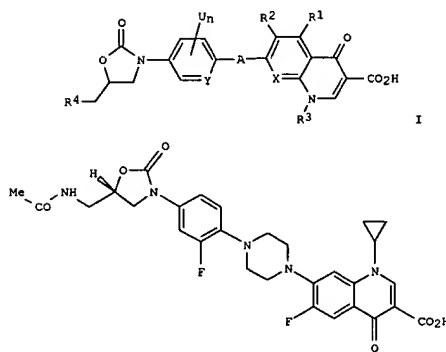
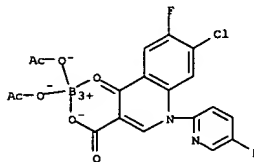
against several gram pos. and gram neg. bacteria; typical MIC ranges (mg/L) are: *S. aureus* (MRSA: 0.125-2; MSSA: 0.06-1), *E. faecalis* (S0.03-1), *E. faecium* (S0.03-1), and *S. pneumoniae* (S0.03-1). They all have a broader and more pronounced activity

ACCESSION NUMBER: 2003:301084 CAPLUS  
DOCUMENT NUMBER: 138:304289  
TITLE: Preparation of dual action bactericides comprising a oxazolidinone and a quinolone or naphthyridinone moiety effective against multi-drug resistant bacteria  
INVENTOR(S): Hubschwerlen, Christian; Specklin, Jean-Luc  
PATENT ASSIGNEE(S): Morphochem Aktiengesellschaft fuer Kombinatorische Chemie, Germany  
SOURCE: PCT Int. Appl., 100 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

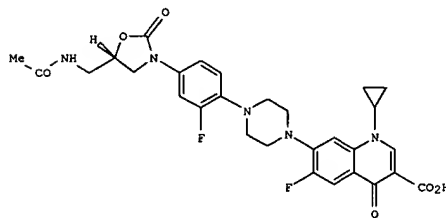
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003031443	A1	20030417	WO 2002-EP10766	20020925
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, GR, GU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
ZA 2004001909	A	20050309	ZA 2004-1909	20040309
PRIORITY APPLM. INFO.:			US 2001-327162P	P 20011004

OTHER SOURCE(S): MARRPAT 138:304289  
GI

than the corresponding quinolone and oxazolidinone as well as a 1+1 combination of these two compds.  
IT 510728-72-0P, 7-Chloro-6-fluoro-1-(5-fluoropyridin-2-yl)-4-oxo-1,4-dihydroquinoline-3-carboxylatoboron diacetate  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of dual action bactericides comprising oxazolidinone and quinolone or naphthyridinone moiety effective against multi-drug resistant bacteria)  
RN 510728-72-0 CAPLUS  
CN Boron, bis(acetato-ko) [7-chloro-6-fluoro-1-(5-fluoro-2-pyridinyl)-1,4-dihydro-4-(oxo-ko)-3-quinolinecarboxylato-ko3]-, [T-4]- (9CI) (CA INDEX NAME)



I



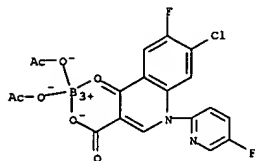
II

AB The present invention relates to oxazolidinones having a quinolone or naphthyridinone moiety (shown as I; variables defined below; e.g. 7-[4-[(5S)-5-(acetylaminoethyl)-2-oxoxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid (shown as II)) that are useful antibacterial agents and effective against a variety of multi-drug resistant bacteria. For I: A is a bond, NH, O, S, SO, SO<sub>2</sub>, SO<sub>2</sub>NH, PO<sub>4</sub>, -NH-CO-NH-, -CO-NH-, -CO-, -CO-O-, -NH-CO-O-, alkylene, alkenylene, alkynylene, heteroalkylene, arylene, heteroarylene, cycloalkylene, heterocycloalkylene, alkylarylene or heteroalkylarylene or a combination of two or more of these atoms or groups. X is CR<sub>5</sub> or N; Y is CR<sub>6</sub> or N; U is F or Cl; n = 0-3; R<sub>1</sub> is H, F, Cl, Br, I, OH, NH<sub>2</sub>, alkyl or heteroalkyl;

R<sub>2</sub> is H, F or Cl; R<sub>3</sub> is H, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroalkylaryl; R<sub>4</sub> is heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroalkylaryl; R<sub>5</sub> is H, F, Cl, OH, NH<sub>2</sub>, alkyl or heteroalkyl, or R<sub>3</sub> and R<sub>5</sub> can be linked via an alkylene, an alkenylene or heteroalkylene or be a part of a cycloalkylene or heterocycloalkylene group, in which case R<sub>3</sub> is not H and R<sub>5</sub> is not H, F, OH, NH<sub>2</sub> or Cl; R<sub>6</sub> is H, F, Cl or OMe. Although the methods of preparation are not claimed, 30 example preps. are included. All examples were tested against several gram pos. and gram neg. bacteria; typical MIC ranges (mg/L) are: *S. aureus* (MRSA: 0.125-2; MSSA: 0.06-1), *E. faecalis* (S0.03-1), *E. faecium* (S0.03-1), and *S. pneumoniae* (S0.03-1). They all have a broader and more pronounced activity than the corresponding quinolone and oxazolidinone as well as a 1+1 combination of these two compds.

IT 510728-72-0P, 7-Chloro-6-fluoro-1-(5-fluoropyridin-2-yl)-4-oxo-1,4-dihydroquinoline-3-carboxylatoboron diacetate  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

L12 ANSWER 17 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 (Reactant or reagent)  
 (prepn. of dual action bactericides comprising oxazolidinone and  
 quinolone or naphthyridinone moiety effective against multi-drug  
 resistant bacteria)  
 RN 510728-72-0 CAPLUS  
 CN Boron, bis(acetato- $\kappa$ O)[7-chloro-6-fluoro-1-(5-fluoro-2-pyridinyl)-  
 1,4-dihydro-4-(oxo- $\kappa$ O)-3-quinolinecarboxylato- $\kappa$ O3]-, (T-4)-  
 (9CI) (CA INDEX NAME)

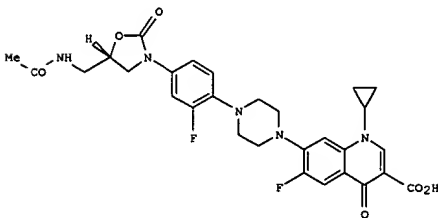
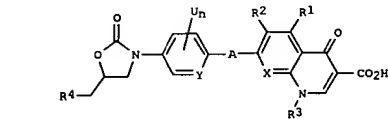


REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE  
 FORMAT

L12 ANSWER 18 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:301082 CAPLUS  
 DOCUMENT NUMBER: 138:304288  
 TITLE: Preparation of dual action bactericides comprising a  
 oxazolidinone and a quinolone or naphthyridinone  
 moiety effective against multi-drug resistant  
 bacteria  
 INVENTOR(S): Hubschwerlen, Christian; Specklin, Jean-Luc  
 PATENT ASSIGNEE(S): Morphochen Aktiengesellschaft fuer Kombinatorische  
 Chemie, Germany  
 SOURCE: PCT Int. Appl., 95 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

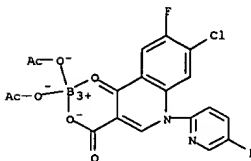
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003031441	A1	20030417	WO 2002-EP10765	20020923
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRIORITY APPLN. INFO.:			US 2001-327208P	P 20011004
OTHER SOURCE(S):		MARPAT 138:304288		
GI				

L12 ANSWER 18 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



AB The present invention refers to novel multiple action compds., i.e., to compds. which contain at least two pharmaceutically active components in one mol. The compds. have a higher stability than corresponding compds. of the prior art. Although the present invention does not claim any specific compds. or even a Markush expression, the examples involve oxazolidinones having a quinolone or naphthyridinone moiety (shown as I; variables defined below; e.g. 7-[4-[(5S)-5-(acetylaminomethyl)-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid (shown as II)) that are useful antibacterial agents and effective against a variety of multi-drug resistant bacteria. For I: A is a bond, NH, O, S, SO, SO2, SO2NH, PO4, -NH-CO-NH-, -CO-NH-, -CO-, -CO-O-, -NH-CO-O-, alkylene, alkenylene, alkynylene, heteroalkylene, arylene, heteroarylene, cycloalkylene, heterocycloalkylene, alkylarylene or heteroarylalkylene or a combination of two or more of these atoms or groups. X is CR5 or N; Y is CR6 or N; U is F or Cl; n = 0-3; R1 is H, F, Cl, Br, I, OH, NH2, alkyl or heteroalkyl; R2 is H, F or Cl; R3 is H, alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroarylalkyl; R4 is heteroalkyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl, alkylaryl or heteroarylalkyl; R5 is H, F, Cl, OH, NH2, alkyl or heteroalkyl, or R3 and R5 can be linked via an alkylene, an alkenylene or heteroalkylene or be a part of a cycloalkylene or heterocycloalkylene group, in which case R3 is not H and R5 is not H, F, OH, NH2 or Cl; R6 is H, F, Cl or OMe. Although the methods of preparation are not claimed, 30 example preps. are included. All examples were tested against several gram pos. and gram neg. bacteria; typical MIC ranges (mg/L) are: S. aureus (MRSA: 0.125-2; MSSA: 0.06-1), E. faecalis (≤0.03-1), E. faecium (≤0.03-1), and S. pneumoniae (≤0.03-1). They all have a

L12 ANSWER 18 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 broader and more pronounced activity than the corresponding quinolone and  
 oxazolidinone as well as a 1+1 combination of these two compds. The  
 examples of this patent are the same as those of WO 03/031443 A1.  
 IT 510728-72-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of dual action bactericides comprising oxazolidinone and  
 quinolone or naphthyridinone moiety effective against multi-drug  
 resistant bacteria)  
 RN 510728-72-0 CAPLUS  
 CN Boron, bis(acetato- $\kappa$ O)[7-chloro-6-fluoro-1-(5-fluoro-2-pyridinyl)-  
 1,4-dihydro-4-(oxo- $\kappa$ O)-3-quinolinecarboxylato- $\kappa$ O3]-, (T-4)-  
 (9CI) (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE  
 FORMAT

L12 ANSWER 19 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:200758 CAPLUS  
 DOCUMENT NUMBER: 138:245327  
 TITLE: Organic electroluminescent device with boron tetraquinolinate derivative  
 INVENTOR(S): Suzuki, Koichi; Senoo, Akihiro; Sven, Anderssen; Ueno,  
 PATENT ASSIGNEE(S): Kazunori  
 SOURCE: Canon Inc., Japan  
 Jpn. Kokai Tokkyo Koho, 23 pp.  
 CODEN: JKKOAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003077671	A2	20030314	JP 2001-265872	20010903
PRIORITY APPLN. INFO.:			JP 2001-265872	20010903

OTHER SOURCE(S): MARPAT 138:245327  
 AB The invention refers to an organic electroluminescent device comprising a boron tetraquinolinate derivative (Markush structures provided) in the organic layer.

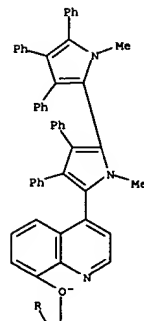
IT 501667-85-2 501667-96-3 501667-87-4  
 501667-88-5 501667-90-9 501667-92-1  
 501667-93-2 501667-98-7 501667-99-8

501668-09-3  
 RL: DEV (Device component use); USES (Uses)  
 (organic electroluminescent device with boron tetraquinolinate derivative)

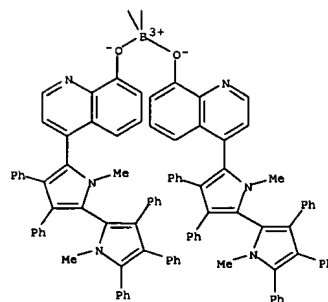
RN 501667-85-2 CAPLUS  
 CN Borate(1-),  
 tetrakis[4-(1,1'-dimethyl-3,3',4,4',5'-pentaphenyl[2,2'-bi-1H-pyrrolyl-5-yl]-8-quinolinolato- $\kappa$ O8)]-, lithium (9CI) (CA INDEX NAME)

L12 ANSWER 19 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-A

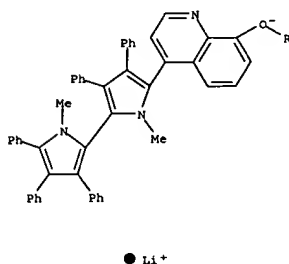


PAGE 2-A



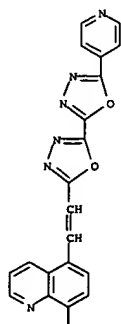
L12 ANSWER 19 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 3-A



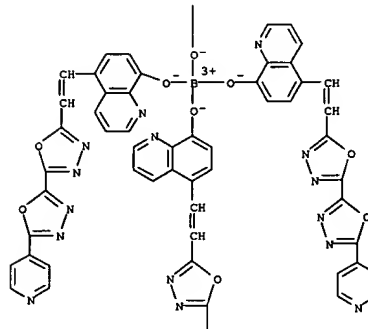
RN 501667-86-3 CAPLUS  
 CN Borate(1-), tetrakis[5-[2-[5'-(4-pyridinyl)[2,2'-bi-1,3,4-oxadiazol]-5-yl]ethenyl]-8-quinolinolato- $\kappa$ O8)]-, potassium (9CI) (CA INDEX NAME)

PAGE 1-A

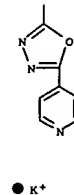


L12 ANSWER 19 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

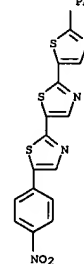
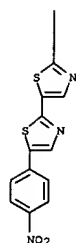
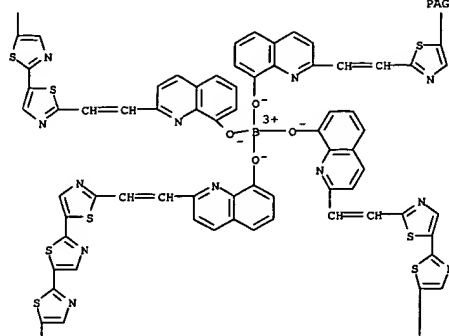
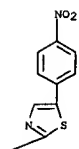
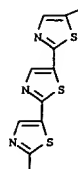
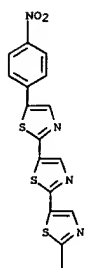
PAGE 2-A



PAGE 3-A

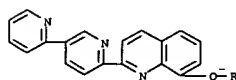
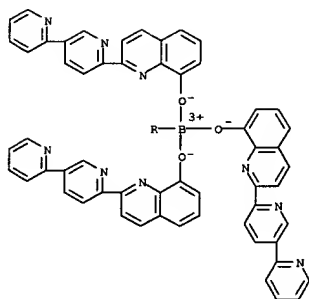


RN 501667-87-4 CAPLUS  
 CN Borate(1-),  
 tetrakis[2-[2-[5-(4-nitrophenyl)[2,5':2',5'':2'',5''':2''',5''-quinquethiazol]-2''''-yl]ethenyl]-8-quinolinolato- $\kappa$ O8)]-, sodium (9CI) (CA INDEX NAME)

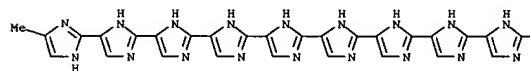


●  $\text{Na}^+$

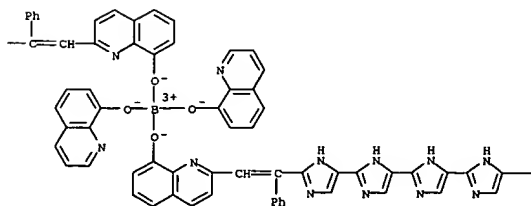
RN 501667-88-5 CAPLUS  
CN Borate(1-), tetrakis(2-[2,3'-bipyridin]-5'-yl-8-quinolinolato-κO8)-,  
lithium (9CI) (CA INDEX NAME)

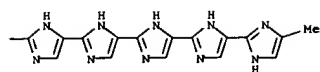


● Li<sup>+</sup>

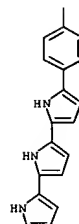
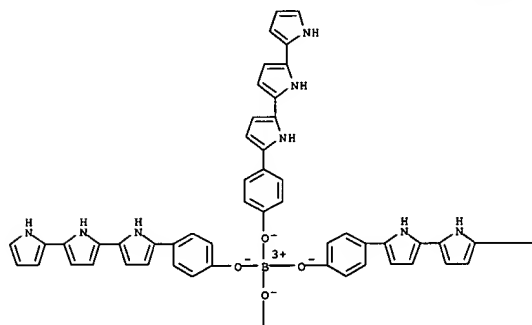
[illegible]

●  $\text{Li}^+$

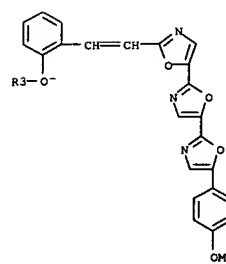
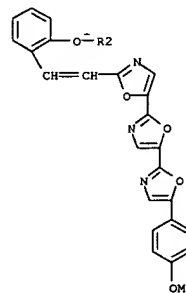
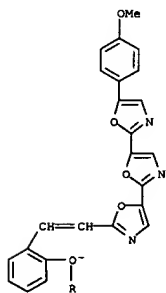
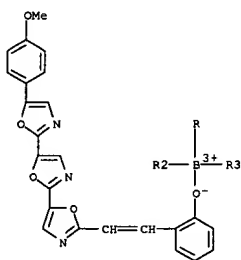




RN 501667-92-1 CAPLUS  
CN Borate(1-), tetrakis(4-[2,2':5',2''-ter-1H-pyrrol]-5-ylphenolato-κO)-, lithium (9CI) (CA INDEX NAME)

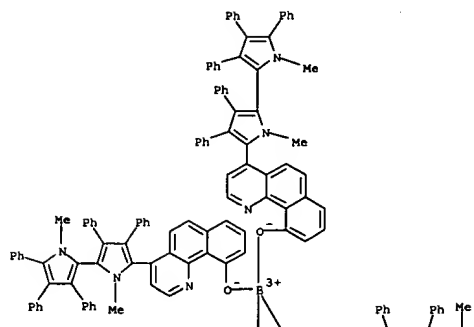


RN 501667-93-2 CAPLUS  
CN Borate(1-),  
tetrakis[2-[2-[5-(4-methoxyphenyl)[2,5':2'',5''-teroxazol]-2''-yl]ethenyl]phenolato-κO]-, potassium (9CI) (CA INDEX NAME)

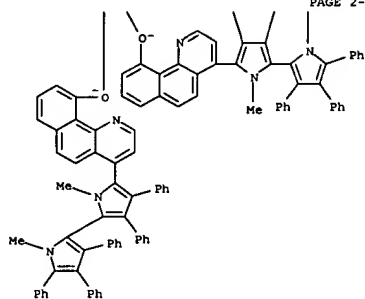


RN 501667-98-7 CAPLUS  
CN Borate(1-),  
tetrakis[4-(1,1'-dimethyl-3,3',4,4',5'-pentaphenyl[2,2'-bi-1H-pyrrol]-5-yl)benzo[h]quinolin-10-olato-κO10]-, potassium (9CI) (CA INDEX NAME)

PAGE 1-A



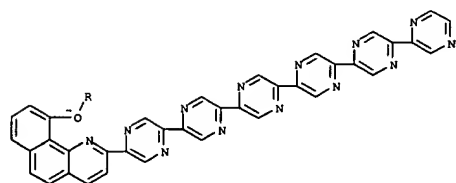
PAGE 2-A



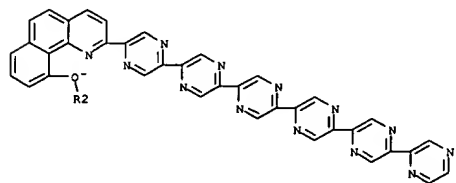
PAGE 3-A



PAGE 3-A



PAGE 4-A



● Li<sup>+</sup>

```

RN      501668-09-3  CAPLUS
CN      Borate(1-),
TetraKis[7-[2-[5-(4-nitrophenyl){2,5':2',5''':2'',5''':2''',5''
''-quinquethiazolol(1-)-yl]ethenyl]benzo[f]quinolin-5-olato-K05]-,
potassium(9CI) (CA INDEX NAME)

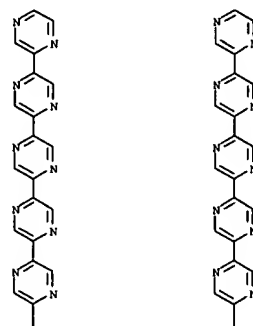
```

```

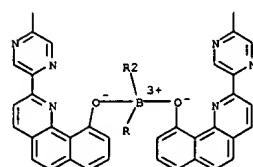
RN      501667-99-8  CAPLUS
CN      Borate(1-), tetrakis(2-[2,2':5',2'':5'',2''':5''',2''':4''',2''':-
sexipyrazin]-5-ylbenzo[h]quinolin-10-olato-κO10)-, lithium (9CIXI)
(CA INDEX NAME)

```

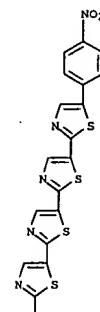
PAGE 1-A



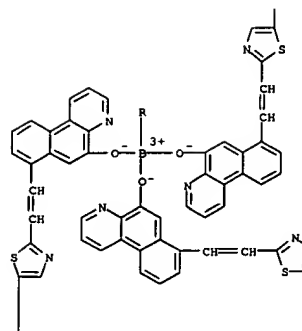
PAGE 2-A



PAGE 1-A

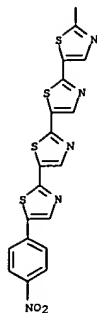
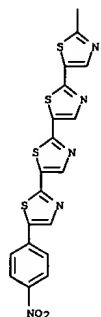


PAGE 2-A

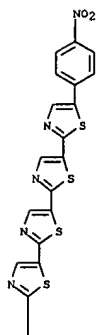




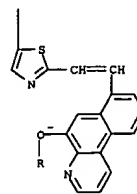
PAGE 3-A



PAGE 4-A



PAGE 5-A

● K<sup>+</sup>

ACCESSION NUMBER: 2003:107142 CAPLUS  
 DOCUMENT NUMBER: 138:296637  
 TITLE: [Mo5VMo7VIO30(BPO4)2(O3P-Ph)6]5-: A  
 Phenyl-Substituted

AUTHOR(S): Molybdenum(V/VI) Boro-Phosphate Polyoxometalate  
 CORPORATE SOURCE: Sassoye, Capucine; Norton, Kieran; Sevov, Slavi C.  
 SOURCE: Department of Chemistry and Biochemistry, University of Notre Dame, Notre Dame, IN, 46556, USA  
 PUBLISHER: Inorganic Chemistry (2003), 42(5), 1652-1655  
 DOCUMENT TYPE: CODEN: INOCAJ; ISSN: 0020-1669  
 LANGUAGE: English  
 OTHER SOURCE(S): American Chemical Society  
 CASREACT 138:296637

AB The polyanion [Mo5VMo7VIO30(BPO4)2(O3PPh)6]5- is the first hybrid borophosphate-phenylphosphonate polyoxometalate. It was structurally characterized as its imidazolium salt, (C3N2H5)5[Mo12O30(BPO4)2(O3PPh)6].c  
 ndot.H2O (monoclinic, P21/c, a 22.120(3), b 13.042(2), and c 32.632(4) Å, β 101.293(3)°), which was synthesized hydrothermally from imidazole, molybdenum oxide and metal, and boric, phosphoric, and phenylphosphonic acids. The anion is the second example of a new class

of polyoxometalates that resemble Dawson anions but where the two pole caps of three edge-sharing MoO6 octahedra in the latter are replaced by other units, in this case tetrahedral borate sharing corners with three phenylphosphonic groups, {(OB)(O3P-Ph)3}. The 12 molybdenum atoms forming

the two equatorial belts of the cluster are of mixed-valence, five are MoV and seven are MoVI, and the resulting five electrons are delocalized.

Four of these electrons are paired according to the temperature dependence of the magnetic susceptibility. The new compound is soluble in a mixture of water and pyridine (in equal vols.) as well as in nitromethane, and the anions are intact in these solns.

IT 506413-04-3P  
 RL: SPH (Synthetic preparation); PREP (Preparation)  
 (preparation of molybdenum borophosphate phenylphosphonate polyoxometalate)

RN 506413-04-3 CAPLUS  
 CN Molybdate(5-), diborateoctadeca-μ-oxododecaoxohexakis(μ3-[phenylphosphonato(2-)-κO:κO':κO''])bis[μ7-[phosphato(3-)-κO:κO':κO':κO'':κO'']dodeca-, pentahydrogen, compd. with pyridine (1:5) (9CI) (CA INDEX NAME)

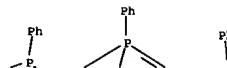
CM 1

CRN 506413-02-1

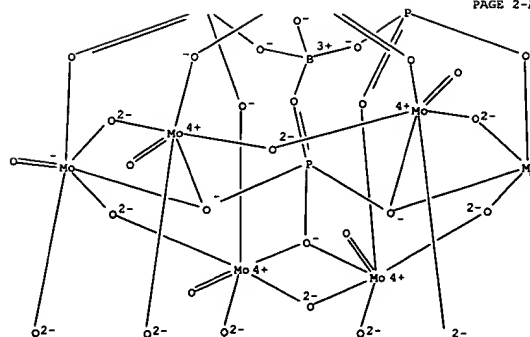
CMF C36 H30 B2 Mo12 O56 P8 . 5 H

CCI CCS

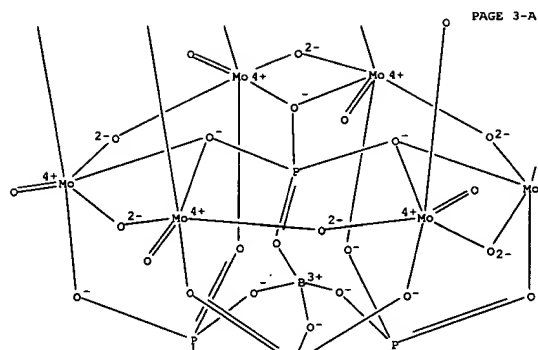
PAGE 1-A



PAGE 2-A

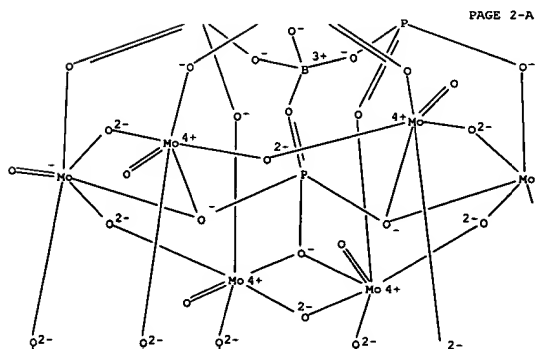
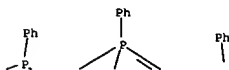


PAGE 2-B



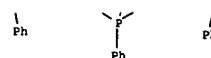
PAGE 3-A

PAGE 1-A



PAGE 2-A

PAGE 3-B



PAGE 4-A

● 5 H<sup>+</sup>

CM 2

CRN 110-86-1  
CMF CS H5 N

IT 506413-03-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation, crystal structure and magnetic susceptibility of molybdenum borophosphate phenylphosphonate polyoxometalate)

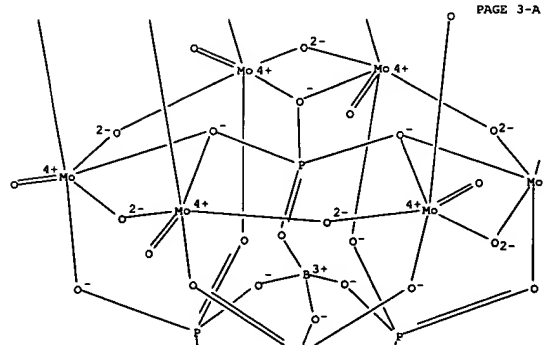
RN 506413-03-2 CAPLUS

CN Molybdate(5-), octadeca-μ-oxododecaoxohexakis[μ3-phenylphosphonato(2-)-κO:κO':κO'']bis[μ7-phosphato(3-)-κO:κO:κO':κO':κO':κO'']diboratedodeca-, pentahydrogen, compd. with 1H-imidazole (1:5), monohydrate (9CI) (CA INDEX NAME)

CM 1

CRN 506413-02-1  
CMF C36 H30 B2 Mo12 O56 P8 . 5 H  
CCI CCS

PAGE 2-B

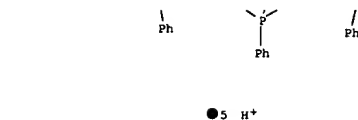


PAGE 3-A

PAGE 3-B



PAGE 4-A



CM 2  
CRN 288-32-4  
CMF C3 H4 N2

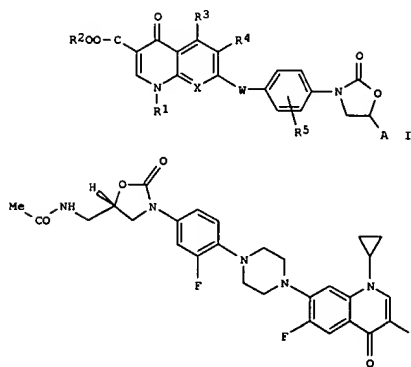


REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

ACCESSION NUMBER: 2003:22874 CAPLUS  
DOCUMENT NUMBER: 138:89799  
TITLE: Preparation of fluoroquinolonyl derivatives of oxazolidinones as antibacterial agents  
INVENTOR(S): Mourelle Mancini, Marisabel; Huguet Clotet, Juan; Hidalgo Rodriguez, Jose; Del Castillo, Juan Carlos  
PATENT ASSIGNEE(S): Vita-Invest, S.A., Spain  
SOURCE: PCT Int. Appl., 110 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003002560	A1	20030109	WO 2002-IB2408	20020624
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GR, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PH, PL, PT, RO			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GN, GQ, GW, ML, MR, NE, NI, TD, TG			
ES 2186550	A1	20030501	ES 2001-1559	20010627
ES 2186550	B2	20031116		
CA 2450982	AA	20030109	CA 2002-2450982	20020624
EE 200400004	A	20040216	EE 2004-4	20020624
EP 1401834	A1	20040331	EP 2002-738497	20020624
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 2004521147	T2	20040715	JP 2003-508941	20020624
CN 1520412	A	20040811	CN 2002-812852	20020624
BR 2002010667	A	20041005	BR 2002-10667	20020624
NZ 530206	A	20050729	NZ 2002-530206	20020624
US 2004147545	A1	20040729	US 2003-469283	20030828
NO 200305791	A	20040219	NO 2003-5791	20031222
BG 108498	A	20050331	BG 2003-108498	20031222
PRIORITY APPL. INFO.:			ES 2001-1559	A 20010627
			WO 2002-IB2408	W 20020624

OTHER SOURCE(S): MARPAT 138:89799  
GI



II

AB This invention discloses new fluoroquinolonyl derivs. of oxazolidinones (shown as I; variables defined below; e.g. 7-[4-[4-[5-(S)-

(acetylaminomethyl)-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid (shown as II)) and processes for obtaining them, the corresponding pharmaceutical

comps. and use thereof for manufacturing a medicament for the treatment of

microbial infections. These new comps. are useful as antibacterial agents. Furthermore phenalen-type comps. according to (II) are disclosed. Comps. I show activity as antibacterial agents; MIC values for .apprx.15 comps. are included. Advantageously they possess a broad spectrum of activity against gram-pos. bacteria such as Staphylococcus, Streptococcus, Enterococcus and the like, as well as against gram-neg. bacteria such as E. Coli, H. Influenzae, M. Catarrhalis, etc., and even against strains resistant to known antibiotics such as metacillin, vancomycin, penicillin, etc. They are also active against anaerobic microorganisms such as Bacteroides fragilis. Thirty-five example preps. of I plus 38 example preps. of intermediates are included. II was prepared

from 7-[4-[4-[5-(S)- (acetylaminomethyl)-2-oxooxazolidin-3-yl]-2-fluorophenyl]piperazin-1-yl]-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid diacetoxymethyl boron chelate in H<sub>2</sub>O and MeCN using 1N NaOH at room temperature; the chelate was prepared from N-[3-(3-fluoro-4-(piperazin-1-yl)phenyl)-2-oxooxazolidin-5-(S)-yl]methylacetamide, 7-chloro-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid diacetoxymethyl boron chelate and Et<sub>3</sub>N in

MeCN at reflux for 16 h. For I: X = CR<sub>6</sub> or N; R<sub>1</sub> = C1-C4-alkyl,

C3-C6-cycloalkyl, C2-C4-alkenyl, 2-hydroxyethyl, 2-fluoroethyl, or Ph optionally substituted by 1 or 2 atoms of F; R<sub>2</sub>: H, alkyl C1-C4 or phenyl;

R<sub>3</sub> = H, halogen, C1-C4-alkyl or C1-C4-alkoxy, amino; R<sub>4</sub> = H or halogen; R<sub>6</sub> = H, halogen, C1-C4-alkyl, C1-C4-haloalkoxy or else R<sub>1</sub> and R<sub>6</sub> together form a bridge of structure -CHMe-CH<sub>2</sub>-O-, -CHMe-CH<sub>2</sub>-S-, -CHMe-CH<sub>2</sub>-CH<sub>2</sub>-.

R<sub>5</sub> = H, halogen, OCH<sub>3</sub>, C1-C4-alkoxy, C1-C4-alkyl or C1-C4-haloalkyl; A = -CH<sub>2</sub>-NH-R<sub>7</sub>, -CHOH-C.tpbond.CH; wherein R<sub>7</sub> = isoxazol, -CO-R<sub>8</sub>, -CS-R<sub>8</sub>, -CS-OR<sub>8</sub>, -COOR<sub>8</sub>, -CONHR<sub>8</sub>, -CSNHR<sub>8</sub>, -SO<sub>2</sub>R<sub>8</sub> or COCH:CHAr (Ar = R<sub>9</sub>-substituted phenyl) wherein R<sub>8</sub> = C1-C4-alkyl, C1-C4-haloalkyl, C2-C4-alkenyl, aryl, C1-C4-alkyl substituted by an C1-C4-alkoxy group, C1-C4-carboxyalkyl, cyano, or amino. R<sub>9</sub>= H, C1-C4-alkyl, C2-C4-alkenyl, CH, C1-C4-alkoxy, NR<sub>12</sub>R<sub>13</sub>, NO<sub>2</sub>, halogen, or CO-R<sub>12</sub>; R<sub>12</sub> and R<sub>13</sub> = H or C1-C4-alkyl; W = azetidiny, pyrrolidiny, azepany, and piperaziny derivs. as more fully described in the claims.

IT 484638-76-8P 484638-77-8P 484638-06-7P

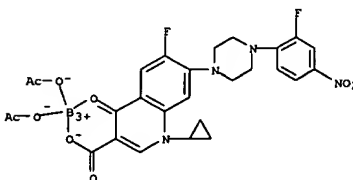
484638-07-8P 484638-08-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

antibacterial agents)

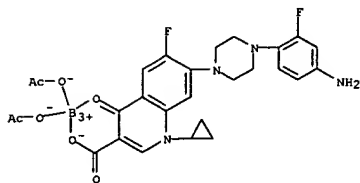
RN 484638-76-8 CAPLUS

CN Boron, bis(acetato-κO)[1-cyclopropyl-6-fluoro-7-(4-(2-fluoro-4-nitrophenyl)-1-piperazinyl)-1,4-dihydro-4-(oxo-κO)-3-quinolinecarboxylato-κO3]-, (T-4)- (9CI) (CA INDEX NAME)

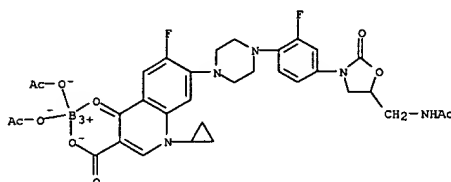


RN 484638-77-9 CAPLUS

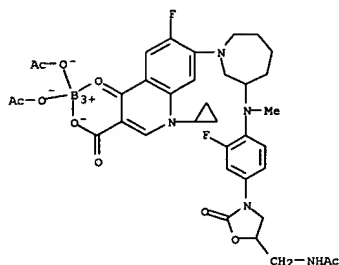
CN Boron, bis(acetato-κO)[7-(4-(4-amino-2-fluorophenyl)-1-piperazinyl)-1-cyclopropyl-6-fluoro-1,4-dihydro-4-(oxo-κO)-3-quinolinecarboxylato-κO3]-, (T-4)- (9CI) (CA INDEX NAME)



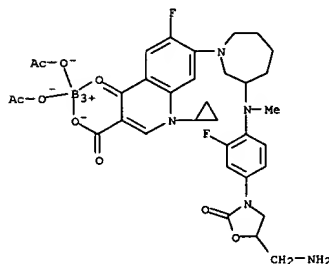
RN 484639-06-7 CAPLUS  
 CN Boron, bis(acetato-κO) [7-[4-[4-[(5S)-5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]-1-piperazinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-(oxo-κO)-3-quinolinecarboxylato-κO3]-, (T-4)- (9CI) (CA INDEX NAME)



RN 484639-07-8 CAPLUS  
 CN Boron, bis(acetato-κO) [7-[3-[[4-[5-[(acetylamino)methyl]-2-oxo-3-oxazolidinyl]-2-fluorophenyl]methylamino]hexahydro-1H-azepin-1-yl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-(oxo-κO)-3-quinolinecarboxylato-κO3]-, (T-4)- (9CI) (CA INDEX NAME)



RN 484639-08-9 CAPLUS  
 CN Boron, bis(acetato-κO) [7-[3-[[4-[5-(aminomethyl)-2-oxo-3-oxazolidinyl]-2-fluorophenyl]methylamino]hexahydro-1H-azepin-1-yl]-1-cyclopropyl-6-fluoro-1,4-dihydro-4-(oxo-κO)-3-quinolinecarboxylato-κO3]-, (T-4)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
 FORMAT

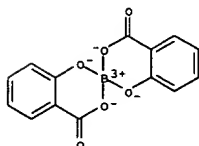
ACCESSION NUMBER: 2002:789169 CAPLUS  
 DOCUMENT NUMBER: 139:16513  
 TITLE: Synthesis of bis(salicylato)borates, bis(naphthalene-2,3-diolato)borates and their analog  
 AUTHOR(S): Turiashvili, L. G.; Machkhoshvili, R. I.;  
 Dzhioshvili,  
 CORPORATE SOURCE: B. D.; Doksopulo, E. P.; Parunashvili, N. A.  
 Tbilis. Gos. Univ. im. Iv. Dzhevakhishvili, Tbilissi,  
 Georgia  
 SOURCE: Sakartvelos Mecnierebata Akademii Macne, Kimiis  
 Seria  
 (2002), 28(1-2), 45-51  
 CODEN: IANKEJ  
 Proizvodstvenno-Izdatel'skoe Ob'edinenie

PUBLISHER: "Mecnierebata"  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Russian  
 OTHER SOURCE(S): CASREACT 139:16513  
 AB HL(BL1L2).nH2O (L = ethanolamine, ethylenediamine, N-phenylethylenediamine, pyridine, 2-amino-5-methylpyridine; H2L1 = H2L2 = salicylic acid, naphthalene-2,3-diol or H2L1 = salicylic acid and H2L2 = naphthalene-2,3-diol) were prepared from B(OH)3, H2L1 and L. The composition and structure of the synthesized compds. were established by IR spectroscopy, thermal and chemical anal. and from elec. conductivity  
 IT 69030-98-4P 532927-80-3P 532927-81-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and thermal decomposition)  
 RN 69030-98-4 CAPLUS  
 CN Borate(1-), bis[2-(hydroxy-κO)benzoato(2-)-κO]-, (T-4)-, hydrogen, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 22450-97-1  
 CMF C14 H8 B O6 . H  
 CCI CCS



● H<sup>+</sup>

CM 2

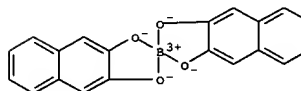
CRN 110-86-1  
 CMF C5 H5 N



RN 532927-80-3 CAPLUS  
 CN Borate(1-), bis[2,3-naphthalenediolato(2-)-κO,κO']-, (T-4)-, hydrogen, compd. with pyridine (1:1), dihydrate (9CI) (CA INDEX NAME)

CM 1

CRN 47422-29-7  
 CMF C20 H12 B O4 . H  
 CCI CCS



● H<sup>+</sup>

CM 2

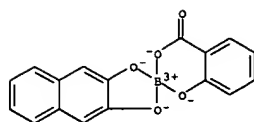
CRN 110-86-1  
 CMF C5 H5 N



RN 532927-81-4 CAPLUS  
 CN Borate(1-), [2-(hydroxy-κO)benzoato(2-)-κO][2,3-naphthalenediolato(2-)-κO,κO']-, (T-4)-, hydrogen, compd. with pyridine (1:1), monohydrate (9CI) (CA INDEX NAME)

CM 1

CRN 532927-77-8  
 CMF C17 H10 B O5 . H  
 CCI CCS

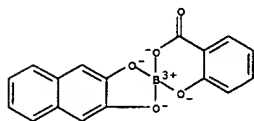
● H<sup>+</sup>

CM 2

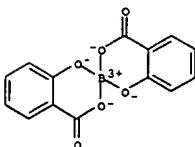
CRN 110-86-1  
CMF C5 H5 N

IT 532927-83-6P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)  
RN 532927-83-6 CAPLUS  
CN Borate(1-), [2-(hydroxy-κO)benzoato(2-)-κO][2,3-naphthalenediolato(2-)-κO,κO']-, (T-4)-, hydrogen, compd. with 5-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 532927-77-8  
CMF C17 H10 B O5 . H  
CCI CCS● H<sup>+</sup>

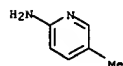
L12 ANSWER 23 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:740867 CAPLUS  
DOCUMENT NUMBER: 138:31671  
TITLE: Development of high-temperature resistant electrolytic solutions  
AUTHOR(S): Kikuchi, Kazunobu  
CORPORATE SOURCE: 1st Dev. Technol. Div., Tomiyama Pure Chem. Ind., Ltd., Japan  
SOURCE: Denka Chikudenki Hyoron (2002), 53(1), 101-110  
CODEN: DCHYAK; ISSN: 0286-5629  
PUBLISHER: Denka Chikudenki Kenkyukai  
DOCUMENT TYPE: Journal  
LANGUAGE: Japanese  
AB Various materials were examined for high-temperature resisting electrolytic solns. by keeping at 120° for 100-1000 h to determine the elec. conductivity, pH, and chromatog. for various cation mixts. Boric acid-disalicylate was more temperature resisting than phthalates which produce impurities during heat treatment. The superior cations were amidine and cyclic tertiary amine.  
IT 221332-52-1 478012-80-5 478012-81-6  
478014-56-1  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(development of high-temperature resistant electrolytic solns.)  
RN 221332-52-1 CAPLUS  
CN Borate(1-), bis[2-(hydroxy-κO)benzoato(2-)-κO]-, (T-4)-, hydrogen, compd. with 1,2-dimethyl-1H-imidazole (1:1) (9CI) (CA INDEX NAME)  
CM 1  
CRN 22450-97-1  
CMF C14 H8 B O6 . H  
CCI CCS

● H<sup>+</sup>

CM 2

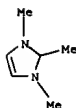
CRN 1739-84-0  
CMF C5 H8 N2

CM 2

CRN 1603-41-4  
CMF C6 H8 N2

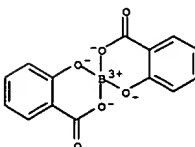
RN 478012-80-5 CAPLUS  
CN 1H-Imidazolium, 1,2,3-trimethyl-, (T-4)-bis[2-(hydroxy-κO)benzoato(2-)-κO]borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 65086-10-4  
CMF C6 H11 N2

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

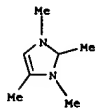
CM 2

CRN 38403-08-6  
CMF C14 H8 B O6  
CCI CCS

RN 478012-81-6 CAPLUS  
CN 1H-Imidazolium, 1,2,3,4-tetramethyl-, (T-4)-bis[2-(hydroxy-κO)benzoato(2-)-κO]borate(1-) (9CI) (CA INDEX NAME)

CM 1

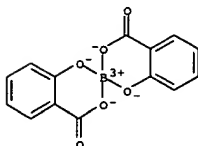
CRN 186612-73-7  
CMF C7 H13 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

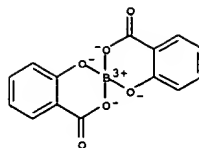
CRN 39403-08-6  
 CMF C14 H8 B O6  
 CCI CCS



RN 478014-56-1 CAPLUS  
 CN Borate(1-), bis[2-(hydroxy-κO)benzoato(2-)-κO]-, (T-4)-, hydrogen, compd. with 1,4,5,6-tetrahydro-1,2-dimethylpyrimidine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 22450-97-1  
 CMF C14 H8 B O6 . H  
 CCI CCS

● H<sup>+</sup>

CM 2

CRN 4271-96-9  
 CMF C6 H12 N2



L12 ANSWER 24 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2002:441202 CAPLUS  
 DOCUMENT NUMBER: 137:27396  
 TITLE: Preparation of tetrakis(acyloxy)borate(1-) and their substituted onium salts  
 INVENTOR(S): Nagata, Hiroshi  
 PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JI00XAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

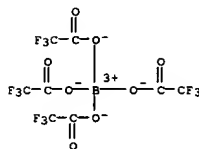
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002167390	A2	20020611	JP 2000-364192	20001130
PRIORITY APPLN. INFO.:			JP 2000-364192	20001130

OTHER SOURCE(S): CASREACT 137:27396; MARPAT 137:27396  
 AB The title [A] [(R1CO2)4B] (I; A = R2R3R4HN<sup>+</sup>, R5R6C:N+HR7; R1 = alkyl, aryl, aralkyl; R2-7 = alkyl, aryl; ≤2 of R2-R4 or R5-R7 may be bonded together to form a ring) are prepared by treating B(OH)3 with (R1CO)2O (R2 = same as above) and NR2R3R4 (R2-R4 = same as above) or R5R6C:NR7 (R5-R7 = same as above). Then, substituted onium salts of I, useful as curing accelerators for epoxy resins used in elec. and electronic materials, are prepared by treating I with tetrasubstituted phosphonium, ammonium, or trisubstituted sulfonium salts. E.g., H3BO3, 1-naphthoic anhydride, 1-naphthoic acid, and Bu3N were stirred at 160° for 4 h to give 85% (based on H3BO3) I (R1 = 1-naphthyl, R2 = R3 = R4 = Bu (II)). Then, a THF solution of the borate II was added dropwise to Me2CHOH solution of [Ph4P]Br at room temperature to give 85% K-free tetraphenylphosphonium tetrakis(1-naphthoxy)borate(1-).  
 IT 424822-39-9P, 1-Benzyl-2-methylimidazolium tetrakis(trifluoroacetato)borate(1-) 424822-42-4P  
 424822-44-6P  
 RL: IMP (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
 (Preparation of tetrakis(acyloxy)borate from boric acid, anhydrides, and tertiary amines or ketimines and their substituted onium salts)

RN 424822-39-9 CAPLUS  
 CN Borate(1-), tetrakis(trifluoroacetato-κO)-, hydrogen, compd. with 2-methyl-1-(phenylmethyl)-1H-imidazole (1:1) (9CI) (CA INDEX NAME)

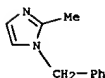
CM 1

CRN 36447-82-2  
 CMF C8 B F12 O8 . H  
 CCI CCS

● H<sup>+</sup>

CM 2

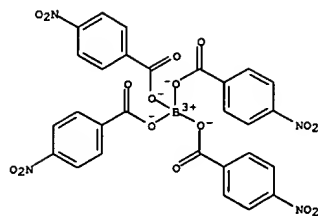
CRN 13750-62-4  
 CMF C11 H12 N2



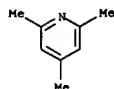
RN 424822-42-4 CAPLUS  
 CN Borate(1-), tetrakis(4-nitrobenzoato-κO)-, hydrogen, compd. with 2,4,6-trimethylpyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 347417-77-0  
 CMF C28 H16 B N4 O16 . H  
 CCI CCS

● H<sup>+</sup>

CM 2

CRN 108-75-8  
CHF C8 H11 NRN 424822-44-6 CAPLUS  
CN 1H-Imidazolium, 1,2,3-trimethyl-, tetrakis(benzoato-kO)borate(1-)  
(9CI) (CA INDEX NAME)

CM 1

CRN 182235-73-0  
CHF C28 H20 B O8  
CCI CCS

ACCESSION NUMBER: 2002:358847 CAPLUS  
DOCUMENT NUMBER: 136:369831  
TITLE: Preparation of tetrakis(acyloxy) borates as curing accelerators for epoxy resins  
INVENTOR(S): Nagata, Hiroshi  
PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
CODEN: JKOXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

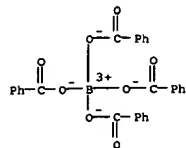
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002138092	A2	20020514	JP 2000-330438	20001030
PRIORITY APPLN. INFO.:			JP 2000-330438	20001030

OTHER SOURCE(S): CASREACT 136:369831; MARPAT 136:369831  
AB (R1CO2)4B-N+HR2R3R4 (I: R1 = alkyl, aryl, aralkyl; R2-R4 = alkyl, aryl; R2R3 = :CR6R7; R6, R7 = alkyl, aryl; R2-R4, R6, R7 may form ring) are prepared by reaction of (R5O)3B (R5 = alkyl, aryl, aralkyl, acyl), (R1CO)2O (R1 = same as in I), R1CO2H (R1 = same as in I), and NR2R3R4 (R2-R4 = same as in I). E.g., tri-Et borate, 1-naphthoic anhydride, 1-naphthoic acid, and Bu3N were heated at 120° for 4 h to give 82% I (R1 = 1-naphthyl, R2-R4 = Bu).

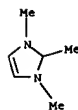
IT 424822-39-9P 424822-42-4P 424822-44-6P  
RL: IMP (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
(Preparation of tetrakis(acyloxy) borates as curing accelerators for epoxy resins)

RN 424822-39-9 CAPLUS  
CN Borate(1-), tetrakis(trifluoroacetato-kO)-, hydrogen, compd. with 2-methyl-1-(phenylmethyl)-1H-imidazole (1:1) (9CI) (CA INDEX NAME)

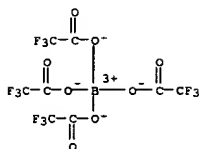
CM 1

CRN 36447-82-2  
CHF C8 B F12 O8 . H  
CCI CCS

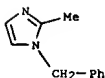
CM 2

CRN 65086-10-4  
CHF C6 H11 N2

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

● H<sup>+</sup>

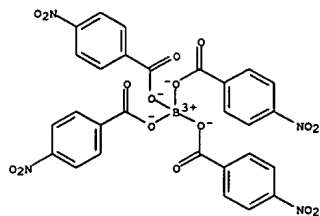
CM 2

CRN 13750-62-4  
CHF C11 H12 N2

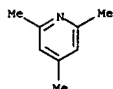
RN 424822-42-4 CAPLUS  
CN Borate(1-), tetrakis(4-nitrobenzoato-kO)-, hydrogen, compd. with 2,4,6-trimethylpyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 347417-77-0  
CHF C28 H16 B N4 O16 . H  
CCI CCS

● H<sup>+</sup>

CM 2

CRN 108-75-8  
CMF C8 H11 N

RN 424822-44-6 CAPLUS  
CN 1H-Imidazolium, 1,2,3-trimethyl-, tetrakis(benzoate-xO)borate(1-)  
(9CI) (CA INDEX NAME)

CM 1

CRN 182235-73-0  
CMF C28 H20 B O8  
CCI CCS

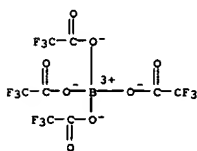
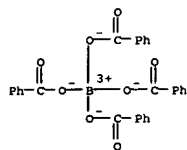
L12 ANSWER 26 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:358846 CAPLUS  
DOCUMENT NUMBER: 136:369830  
TITLE: Preparation of tetrakis(acyloxy) borates as curing accelerators for epoxy resins  
INVENTOR(S): Nagata, Hiroshi  
PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
CODEN: JKOXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002138091	A2	20020514	JP 2000-330140	20001030
PRIORITY APPLN. INFO.:			JP 2000-330140	20001030

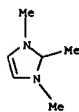
OTHER SOURCE(S): CASREACT 136:369830; MARPAT 136:369830  
AB (R1CO2)4B-.N+HR2R3R4 (I; R1 = alkyl, aryl, aralkyl; R2-R4 = alkyl, aryl; R2-R4 may form ring) are prepared by reaction of B2O3, (R1CO)2O (R1 = same as in I), R1CO2H (R1 = same as in I), and NR2R3R4 (R2-R4 = same as in I). E.g., B2O3, 1-naphthoic anhydride, 1-naphthoic acid, and Bu3N were heated at 160° for 4 h to give 85% I (R1 = 1-naphthyl, R2-R4 = Bu).  
IT 424822-39-9P 424822-42-4P 424822-44-6P  
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
(preparation of tetrakis(acyloxy) borates as curing accelerators for epoxy resins)

RN 424822-39-9 CAPLUS  
CN Borate(1-), tetrakis(trifluoroacetato-xO)-, hydrogen, compd. with 2-methyl-1-(phenylmethyl)-1H-imidazole (1:1) (9CI) (CA INDEX NAME)

CM 1

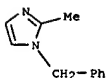
CRN 36447-82-2  
CMF C8 B F12 O8 . H  
CCI CCS● H<sup>+</sup>

CM 2

CRN 65086-10-4  
CMF C6 H11 N2

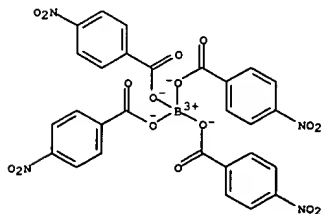
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 13750-62-4  
CMF C11 H12 N2

RN 424822-42-4 CAPLUS  
CN Borate(1-), tetrakis(4-nitrobenzoate-xO)-, hydrogen, compd. with 2,4,6-trimethylpyridine (1:1) (9CI) (CA INDEX NAME)

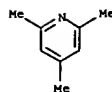
CM 1

CRN 347417-77-0  
CMF C28 H16 B N4 O16 . H  
CCI CCS● H<sup>+</sup>

CM 2

CRN 108-75-8  
CMF C8 H11 N

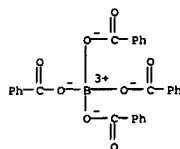




RN 424822-44-6 CAPLUS  
CN 1H-Imidazolium, 1,2,3-trimethyl-, tetrakis(benzoato-κO)borate(1-)  
(9CI) (CA INDEX NAME)

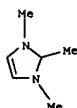
CM 1

CRN 162235-73-0  
CMF C28 H20 B O8  
CCI CCS

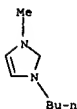


CM 2

CRN 65086-10-4  
CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

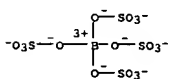


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 497881-63-7 CAPLUS  
CN 1H-Imidazolium, 1-methyl-3-octyl-, hydrogen tetrakis(sulfato(2-)-κO)borate(5-)  
(1:4:1) (9CI) (CA INDEX NAME)

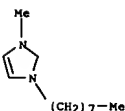
CM 1

CRN 497881-61-5  
CMF B O16 S4  
CCI CCS



CM 2

CRN 178631-03-3  
CMF C12 H23 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS

FORMAT

RECORD. ALL CITATIONS AVAILABLE IN THE RE

ACCESSION NUMBER: 2002:282748 CAPLUS  
DOCUMENT NUMBER: 138:170125  
TITLE: Hydrogen sulfate and tetrakis(hydrogen sulfato)borate ionic liquids: synthesis and catalytic application in highly Bronsted-acidic systems for Friedel-Crafts alkylation

AUTHOR(S): Wasserscheid, Peter; Seising, Martin; Korth, Wolfgang  
CORPORATE SOURCE: Institut fuer Technische Chemie und Makromolekulare Chemie der RWTH Aachen, Aachen, D-52074, Germany

SOURCE: Green Chemistry (2002), 4(2), 134-138  
CODEN: GRCHFJ; ISSN: 1463-9262

PUBLISHER: Royal Society of Chemistry  
DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:170125

AB Hydrogen sulfate and tetrakis(hydrogen sulfato)borate ionic liqs. have been synthesized and characterized. These ionic liqs. are halogen-free, available from cheap raw materials and easy to prepare. They have been

used as additives to sulfuric acid in the Friedel-Crafts alkylation of benzene with 1-decene. The results clearly demonstrate an interplay of acidity and solubility effects caused by the ionic liquid additive. In some cases, low ams. of ionic liquid additive result in a dramatic improvement of product yield.

IT 497881-62-6P 497881-63-7P  
RL: CAT (catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

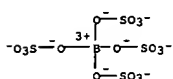
(preparation of imidazolium hydrogen sulfate and tetrakis(hydrogensulfato)borate ionic liqs. as catalysts for Friedel-Crafts alkylation)

RN 497881-62-6 CAPLUS

CN 1H-Imidazolium, 1-butyl-3-methyl-, hydrogen tetrakis(sulfato(2-)-κO)borate(5-)  
(1:4:1) (9CI) (CA INDEX NAME)

CM 1

CRN 497881-61-5  
CMF B O16 S4  
CCI CCS



CM 2

CRN 80432-08-2  
CMF C8 H15 N2

ACCESSION NUMBER: 2002:237754 CAPLUS  
DOCUMENT NUMBER: 137:13532  
TITLE: A polycyclic condensate of phenylboronic and boric acids with N-hydroxypiperidine

AUTHOR(S): Kliegel, Wolfgang; Drucekler, Klaus; Patrick, Brian O.; Rettig, Steven J.; Trotter, James

CORPORATE SOURCE: Technische Universitaet Braunschweig, Institut fuer Pharmazeutische Chemie, Braunschweig, 38106, Germany  
Acta Crystallographica, Section E: Structure Reports Online (2002), E58(4), o393-o395  
CODEN: ACSEBH; ISSN: 1600-5368

URL: <http://journals.iucr.org/e/issues/2002/04/00/om60>

PUBLISHER: International Union of Crystallography

DOCUMENT TYPE: Journal: (online computer file)

LANGUAGE: English

AB Crystals of 1-hydroxypiperidinium 16-hydroxy-6,6-pentamethylene-11,13,19-triphenyl-19-(1-piperidinimoxo)-8,10,12,14,15,17,18,20-octaosa-6-azonia-11,13,16-tribora-7,9,19-triboratatrispiro[5.0.1.5.3.3]eicosane Et2O hemisolvate are triclinic, space group P.hivin.1, with a 10.636(2), b 15.340(2), c 15.545(2) Å, α 105.467(2), β 107.949(4), γ 109.453(2)°; Z = 2, dc = 1.226; R = 0.043, Rw(F2) 0.102 for 8500 reflections. The compound contains a tetracyclic ring system, with

two boroxine, a BOBON, and a piperidinium ring spiro-fused; the Et2O solvent mol. is disordered over an inversion center.

IT 433330-52-0P, 1-Hydroxypiperidinium 16-hydroxy-6,6-pentamethylene-

11,13,19-triphenyl-19-(1-piperidinimoxo)-8,10,12,14,15,17,18,20-octaosa-6-azonia-11,13,16-tribora-7,9,19-triboratatrispiro[5.0.1.5.3.3]eicosane compound with ethyl ether (2:1)

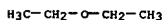
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and crystal structure of)

RN 433330-52-0 CAPLUS

CN Borate(2-), [μ-[1-(hydroxy-κO)piperidinato-κN]] [1-(hydroxy-κO)piperidine] [μ-[orthoborate(3-)-κO:κO']] di-μ-oxophenyl[(phenylboronic acid-κO) bimol. monoanhydrido(2-)] tri-, dihydrogen, compd. with 1-hydroxypiperidine and 1,1'-oxybis[ethane] (2:2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 60-29-7  
CMF C4 H10 O



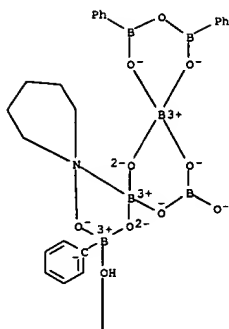
CM 2

CRN 433330-51-9  
CMF C28 H36 B6 N2 O10 . C5 H11 N O . 2 H

CM 3

CRN 433330-50-8  
CMF C28 H36 B6 N2 O10 . 2 H

PAGE 1-A



PAGE 2-A



● 2 H<sup>+</sup>

CM 4

CRN 4801-58-5  
CMF C5 H11 N O

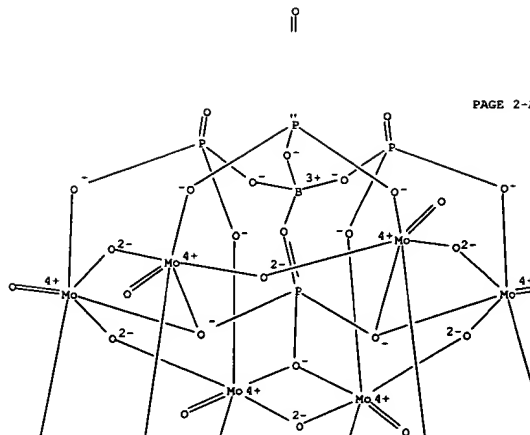


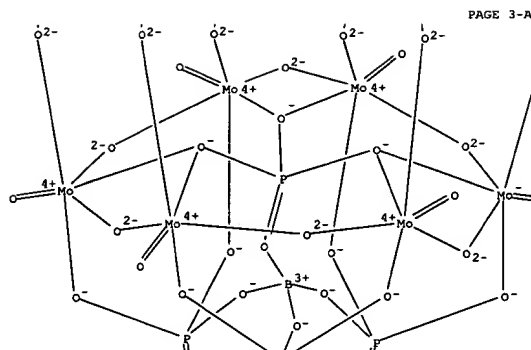
L12 ANSWER 29 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2002:54507 CAPLUS  
DOCUMENT NUMBER: 136:256313  
TITLE: A Reduced Polyoxomolybdenum Borophosphate Anion  
Related to the Wells-Dawson Clusters  
AUTHOR(S): Dumas, Eddy; Debieux-Chouvy, Catherine; Sevov, Slavi  
CORPORATE SOURCE: Department of Chemistry and Biochemistry, University  
of Notre Dame, Notre Dame, IN, 46556, USA  
SOURCE: Journal of the American Chemical Society (2002),  
124(6), 908-909  
CODEN: JACSAT; ISSN: 0002-7863  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 136:256313  
AB (C3N2H5)8[MoV5MoVI7O22(BO4)2(PO4)5(HPO4)3]·nH2O (n = 4,  
C3N2H5 = imidazolium) is the 1st molybdenum borophosphate. It contains  
clusters of twelve molybdenum, eight phosphorus and two boron atoms,  
(Mo12O22(BO4)2(PO4)5(HPO4)3)8- similar to the Wells-Dawson clusters.  
Five molybdenum atoms are MoV while the others are MoVI, and the five  
electrons are delocalized. According to the temperature dependence of the magnetic  
susceptibility four of these electrons are paired.  
IT 403824-78-2P  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation, crystal structure and magnetic susceptibility of  
polyoxomolybdenum borophosphate cluster)  
RN 403824-78-2 CAPLUS  
CN Molybdate[11-], diborateoctadeca-μ-oxododecaoxohexakis(μ3-  
[phosphato(3-)-κO:κO':κO'']bis(μ7-[phosphato(3-)-  
κO:κO':κO':κO':κO':κO''])d  
odeca-, undecahydrogen, compd. with 1H-imidazole (1:8), tetrahydrate  
(9CI)  
(CA INDEX NAME)  
CM 1  
CRN 403824-77-1  
CMF B2 Mo12 O62 P8 . 11 H  
CCI CCS

L12 ANSWER 29 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-A

PAGE 2-A





L12 ANSWER 30 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:885417 CAPLUS  
 DOCUMENT NUMBER: 136:6139  
 TITLE: Ionic liquids  
 INVENTOR(S): Hilarius, Volker; Heider, Udo; Schmidt, Michael  
 PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany  
 SOURCE: Eur. Pat. Appl., 27 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

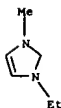
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1160249	A2	20011205	EP 2001-113237	20010530
EP 1160249	A3	20030917		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 10026565	A1	20011206	DE 2000-10026565	20000530
BR 2001002084	A	20020319	BR 2001-2084	20010523
CA 2348966	AA	20011130	CA 2001-2348966	20010528
JP 2002187893	A2	20020705	JP 2001-158940	20010528
CN 1326936	A	20011219	CN 2001-119371	20010530
US 2002015883	A1	20020207	US 2001-866926	20010530
PRIORITY APPLN. INFO.: DE 2000-10026565 A 20000530				

AB The preparation of title compds. is described. Thus, reaction of methylimidazole with chloroethane in MeCN gave ethylmethylimidazolium chloride which on basic hydrolysis gave 1-ethyl-3-methylimidazolium hydroxide. Reaction of 1-ethyl-3-methylimidazolium hydroxide with boric acid in presence of oxalic acid gave title compound, 1-ethyl-3-methylimidazoliumbis[1,2-oxalato(2-)-O,O']borate.

IT 376650-04-3P 376650-05-4P 376650-06-5P  
 376650-07-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation as ionic liquid)  
 RN 376650-04-3 CAPLUS  
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, (T-4)-bis[1,2-benzenediolato(2-)- $\kappa$ O, $\kappa$ O']borate(1-) (9CI) (CA INDEX NAME)

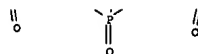
CM 1

CRN 65039-03-4  
 CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2



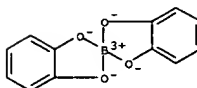
CM 2

CRN 288-32-4  
 CMF C3 H4 N2



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

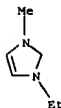
CRN 16986-25-7  
 CMF C12 H8 B O4  
 CCI CCS



RN 376650-05-4 CAPLUS  
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, (T-4)-bis[2-(hydroxy- $\kappa$ O)benzoato(2-)- $\kappa$ O]borate(1-) (9CI) (CA INDEX NAME)

CM 1

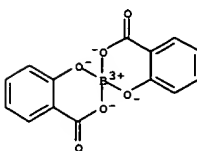
CRN 65039-03-4  
 CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

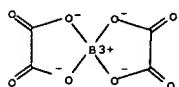
CRN 38403-08-6  
 CMF C14 H8 B O6  
 CCI CCS



RN 376650-06-5 CAPLUS  
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, (T-4)-bis[ethanedioato(2-)- $\kappa$ O1, $\kappa$ O2]borate(1-) (9CI) (CA INDEX NAME)

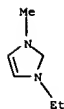
CM 1

CRN 125579-65-9  
 CMF C4 B O8  
 CCI CCS



CM 2

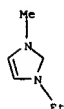
CRN 65039-03-4  
 CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RN 376650-07-6 CAPLUS  
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, (T-4)-bis(2-(hydroxy-  
 κO)propanoato(2-)-κO)borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 65039-03-4  
 CMF C6 H11 N2

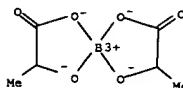
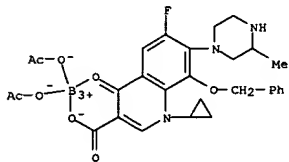


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

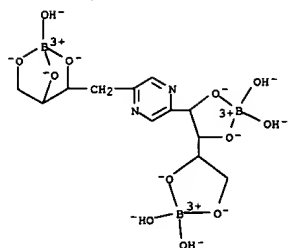
CM 2

CRN 31168-89-5  
 CMF C6 H8 B O6  
 CCI CCS

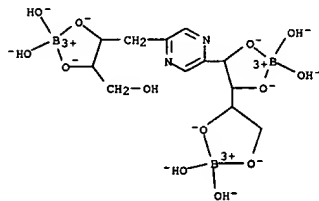
ACCESSION NUMBER: 2001:859096 CAPLUS  
 DOCUMENT NUMBER: 137:201216  
 TITLE: New synthesis of Gatifloxacin  
 AUTHOR(S): Liu, Jiuyu; Tian, Zhiming; Guo, Huiyuan  
 CORPORATE SOURCE: Institute of Medicinal Biotechnology, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, 100050, Peop. Rep. China  
 SOURCE: Zhongguo Yiyao Gongye Zazhi (2001), 32(10), 433-437  
 CODEN: ZYGLZA; ISSN: 1001-8255  
 PUBLISHER: Zhongguo Yiyao Gongye Zazhi Bianjibu  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 OTHER SOURCE(S): CASREACT 137:201216  
 AB Gatifloxacin was synthesized from 3-hydroxy-2,4,5-trifluorobenzoic acid via 13 steps, with low overall yield. Ten new compds. were obtained, and their structures were characterized by 1H-NMR and MS.  
 IT 452369-66-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis of Gatifloxacin)  
 RN 452369-66-3 CAPLUS  
 CN Boron, bis(acetato-κO)[1-cyclopropyl-6-fluoro-1,4-dihydro-7-(3-methyl-1-piperazinyl)-4-(oxo-κO)-8-(phenylmethoxy)-3-quinolinecarboxylato-κO3]-, (T-4)- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 2001:790434 CAPLUS  
 DOCUMENT NUMBER: 136:151372  
 TITLE: A clean conversion of D-glucosamine hydrochloride to a pyrazine in the presence of phenylboronate or borate  
 AUTHOR(S): Rohovec, Jan; Kotek, Jan; Peters, Joop A.; Maschmeyer, Thomas  
 CORPORATE SOURCE: Department of Applied Organic Chemistry and Catalysis,  
 SOURCE: Delft University of Technology, Delft, 2628 BL, Neth. European Journal of Organic Chemistry (2001), (20), 3899-3901  
 CODEN: EJOCFK; ISSN: 1434-193X  
 PUBLISHER: Wiley-VCH Verlag GmbH  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 136:151372  
 AB D-Glucosamine was found to undergo a condensation to give 2-(arabino-tetrahydroxybutyl)-5-(erythro-2,3,4-trihydroxybutyl)-pyrazine as practically the sole product in the presence of phenylboronate or borate. The reaction proceeds in aqueous solns. at room temperature in 3 h in 58% isolated yield. In D2O solns., the incorporation of one deuterium into the methylene group of the trihydroxybutyl arm was found. The borate esters of the product were investigated by 11B and 13C NMR spectroscopy.  
 IT 394251-85-SP 394251-86-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (clean conversion of D-glucosamine hydrochloride to a pyrazine in the presence of phenylboronate or borate)  
 RN 394251-85-5 CAPLUS  
 CN Borate(3-), pentahydroxy[μ3-[(1R,2S,3R)-1-[(2S,3R)-2,3,4-tri(hydroxy-κO)butyl]pyrazinyl]-1,2,3,4-butanetetrolato(7-)-κO1,κO2:κO3,κO4]]tri-, trisodium (9CI) (CA INDEX NAME)

● 3 Na<sup>+</sup>

RN 394251-86-6 CAPLUS  
 CN Borate(3-), hexahydroxy[μ<sub>3</sub>-(1R,2S,3R)-1-[5-[(2S,3R)-2,3-di(hydroxy-  
 κO)-4-hydroxybutyl]pyrazinyl]-1,2,3,4-butanetetrolato(6-)-  
 κO1,κO2:κO3,κO4]tri-, trisodium (9CI) (CA INDEX  
 NAME)

● 3 Na<sup>+</sup>

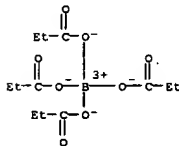
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR  
 THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE  
 FORMAT



RN 362588-75-8 CAPLUS  
 CN 1H-Imidazolium, 1,2,3-trimethyl-, tetrakis(propanoato-κO)borate(1-)  
 (9CI) (CA INDEX NAME)

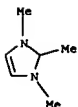
CM 1

CRN 362588-72-5  
 CMF C12 H20 B O8  
 CCI CCS



CM 2

CRN 65086-10-4  
 CMF C6 H11 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L12 ANSWER 33 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:704739 CAPLUS  
 DOCUMENT NUMBER: 135:273687  
 TITLE: Synthetic methods for tetrakis(acyloxy)borates and  
 substituted onium tetrakis(acyloxy)borates  
 INVENTOR(S): Nagata, Hiroshi; Go, Yoshiyuki  
 PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKOXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001261684	A2	20010926	JP 2000-76942	20000317
PRIORITY APPLN. INFO.: JP 2000-76942 20000317				

OTHER SOURCE(S): MARPAT 135:273687  
 AB Boron trihalides react with carboxylic acid salts of amines or amidines  
 to

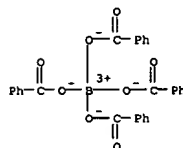
prepare the title compds. Onium tetrakis(acyloxy)borates are useful for  
 hardening accelerators for epoxy resins. Thus, triethylamine 1-naphthoic  
 acid salt reacted with BBr<sub>3</sub> to prepare triethylamine tetrakis(1-  
 naphthoxy)borate.

IT 347417-74-7P 362588-75-8P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (manufacture of tetrakis(acyloxy)borates and substituted onium  
 tetrakis(acyloxy) borates)

RN 347417-74-7 CAPLUS  
 CN Borate(1-), tetrakis(benzoato-κO)-, hydrogen, compd. with  
 2-methyl-1H-imidazole (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 347417-73-6  
 CMF C28 H20 B O8 . H  
 CCI CCS

● H<sup>+</sup>

CM 2

L12 ANSWER 34 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:684013 CAPLUS  
 DOCUMENT NUMBER: 135:227999  
 TITLE: Epoxy sealants with good curability and semiconductor  
 devices using them  
 INVENTOR(S): Okubo, Akiko; Miyake, Sumiya  
 PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKOXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001253933	A2	20010918	JP 2000-65588	20000309
PRIORITY APPLN. INFO.: JP 2000-65588 20000309				

OTHER SOURCE(S): MARPAT 135:227999  
 AB The semiconductor sealants comprise (A) crystalline epoxy resins (m.p.  
 50-150°) having 22 epoxy groups in a mol., (B) compds.

having 22 phenolic OH in a mol., (C) R<sub>1</sub>R<sub>2</sub>R<sub>3</sub>R<sub>4</sub>N<sup>+</sup>X<sup>-</sup> (I; R<sub>1</sub>-4 = H,  
 monovalent aliphatic group, monovalent groups containing aromatic rings

or heterorings; X = R<sub>5</sub>R<sub>6</sub>R<sub>7</sub>R<sub>8</sub>B; at least one of R<sub>5</sub>-8 = proton-released proton  
 donor residues; rest of R<sub>5</sub>-8 = same as R<sub>1</sub>-4; elec. conductivity of the

proton donors ≤650 μS/cm for 2% aqueous solns. after a pressure cooker  
 treatment), and (D) 200-2400 parts (based on 100 parts of A + B) inorg.  
 fillers. Thus, a composition comprising 3,3',5,5'-tetramethylbiphenol  
 diglycidyl ether polymer, HOC<sub>6</sub>H<sub>4</sub>(CH<sub>2</sub>-p-C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>C<sub>6</sub>H<sub>3</sub>(OH))<sub>2</sub>2.5H, I (R<sub>1</sub>-4 =

Me, X = Ph<sub>3</sub>BOQ, Q = 1-naphthalenyl; elec. conductivity of 1-naphthol 15  
 μS/cm),

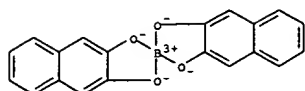
fused spherical silica, and other additives showed spiral flow 93 cm,  
 curing torque 90 kg-cm, spiral flow retention 90% after 1-wk storage, and  
 good moisture resistance after cured.

IT 359765-78-8P 359767-63-8P  
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);  
 USES (Uses)  
 (curing catalyst; epoxy sealants with good curability and storage  
 stability for semiconductor devices)

RN 359765-78-9 CAPLUS  
 CN Pyrrolidinium, 1,1-dimethyl-, (T-4)-bis(2,3-naphthalenediolato(2-)-  
 κO,κO')borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 53992-98-6  
 CMF C20 H12 B O4  
 CCI CCS



CM 2

CRN 15312-12-6

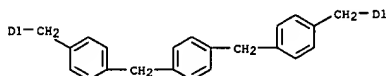
CMF C6 H14 N



RN 359767-63-8 CAPLUS  
CN Pyridinium, 1-methyl-, [2(or 5)-[[4-[[[hydroxy-  
κO)phenyl]methyl]phenyl]methyl]-5(or 2)-[[4-  
[[[hydroxyphenyl]methyl]phenyl]methyl]phenolato]triphenoxyborate(1-) (9CI)  
(CA INDEX NAME)

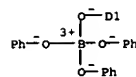
CM 1  
CRN 359767-62-7  
CMF C52 H44 B 06  
CCI CCS, IDS

PAGE 1-A



2 ( D1-OH )

PAGE 2-A



CM 2

CRN 694-56-4

CMF C6 H8 N



L12 ANSWER 36 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2001:545618 CAPLUS  
DOCUMENT NUMBER: 135:139375  
TITLE: Methods of preparation of nonaborate compositions  
INVENTOR(S): Schubert, David M.  
PATENT ASSIGNEE(S): U.S. Borax Inc., USA  
SOURCE: PCT Int. Appl., 23 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 200153201	A1	20010726	WO 2001-US1711	20010811
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, ES, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KK, LC, LC, LR, LS, LT, LU, LV, MA, MG, MK, MN, MW, MX, MY, NZ, NL, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TZ, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, HU, IE, JP, KE, KG, KP, KR, KZ, LG, LR, LS, LT, LU, LV, MA, MG, MK, MN, MW, MX, MY, NZ, NL, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TZ, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
EP 1254075	A1	20021106	EP 2001-904921	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003523964	T2	20030812	JP 2001-553215	20010811
TW 568015	B	20040521	TW 2001-90101327	20010119
US 200109751	A1	200130612	US 2002-181628	20020719
US 6519036	B2	20050719		
PRIORITY: 8801-1100			US 2002-174626	P 20000121

AB A family of borate compds. containing an isolated (finite) nonaborate anion with the structural formula  $[B9O12(OH)6]^{3-}$  is disclosed. Preferred amine nonaborate compds. have a relative oxide formula of  $A2O.3B2O3.2H2O$ , where A is the monovalent cation of an amine salt, such as guanidinium and imidazolium. Also provided is a method for preparing these compds. by crystallization from an aqueous solution under mild conditions without the formation of significant amts. of byproducts. These compds. have potential application as precursors for the production of advanced boron nitride ceramic materials, and as flame retardants, corrosion inhibitors, and biocides.

IT 351428-05-2 RL: RCT (Reactant); RACT (Reactant or reagent) (methods of preparation of nonaborate compns.)

RN 351428-05-2 CAPLUS

CN Borate(9-), bis[μ-(orthoborate(3-))-κO:κO']d1d-u-xobis[μ-(tetraoxodiborate(4-))tr1r-, nonahydrogen, compd. with H-imidazole (1:3) (9G1) (CA INDEX NAME)

CM 1

CRN 273750-76-8

CMF B9 018 . 9 H

LANGUAGE: English  
AB The acidity on the proton affinity scale was determined by IR spectroscopy of the pyridinium salts for nineteen heteropoly acids of nine structural types (including two with the previously unknown structure) and one isopoly acid. All heteropoly acids exhibited a high acidity at the level of CF<sub>3</sub>SO<sub>3</sub>H and HClO<sub>4</sub>. H<sub>3</sub>PW<sub>12</sub>O<sub>40</sub> was the strongest acid.

```
IT      360453-19-4  
       RI: PRP (Properties)  
          (acidity studied by IR spectroscopy)  
RN      360453-19-4 CAPLUS  
CN      Tungstatac(21-), heneicosatenu-p-oxononatricontaoxotris[mull-  
         Tetrahydroxyborato(5--)-kO;xo';xo';xo';xo';xo'.ka  
         [o';xo';xo';xo';xo';xo';xo';xo';xo']nonaricaxo-  
         name: heneicosahydrogen, compd. with pyridine (1:21) (9CI) (CA INDEX  
         NAME)
```

CM 1

CRN 243445-97-8

CMF B3 0132 W39 . 21 H

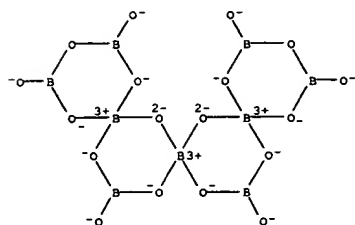
CCI CCS

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2  
CRN 110-86-1  
CMF C5 H5 N



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
FORMAT



● 9 H<sup>+</sup>

CM 2  
CRN 288-32-4  
CMF C3 H4 N2



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

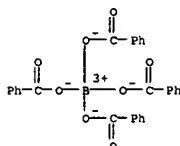
L12 ANSWER 37 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2001:479794 CAPLUS  
DOCUMENT NUMBER: 135:77683  
TITLE: Manufacture of tetraacyl borates as crosslinking accelerators for epoxy resin for electric materials  
INVENTOR(S): Nagata, Hiroshi; Miyake, Sumiya; Go, Yoshiyuki  
PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
CODEN: JKOKAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001181282	A2	20010703	JP 1999-371772	19991227
PRIORITY APPLN. INFO.: JP 1999-371772 19991227				

OTHER SOURCE(S): MARPAT 135:77683  
AB The tetraacyl borates are manufactured by a reaction of (R1CO2)(R2CO2)(R3CO2)B with salts comprising NR4R5R6 and R7CO2H (R1-R3, R7 = alkyl, aryl, aralkyl; R4-R6 = alkyl, aryl; 22 of R4-R6 may form a ring). Thus, Et3N and a heptane solution of BBr3 were successively added into 1-naphthoic acid to give boron tri(1-naphthoate), which was heated with 1-naphthoic acid triethylamine salt to give 93% boron tetra(1-naphthoate) triethylamine salt.  
IT 347417-74-7P  
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)  
(manufacture of tetraacyl borates as crosslinking accelerators for epoxy resins)

RN 347417-74-7 CAPLUS  
CN Borate(1-), tetrakis(benzoato-κO)-, hydrogen, compd. with 2-methyl-1H-imidazole (1:1) (9CI) (CA INDEX NAME)

CM 1  
CRN 347417-73-6  
CMF C28 H20 B O8 . H  
CCI CCS



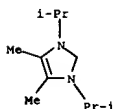
● H<sup>+</sup>

CM 2  
CRN 693-98-1  
CMF C4 H6 N2



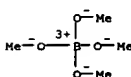
L12 ANSWER 38 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2001:393042 CAPLUS  
DOCUMENT NUMBER: 135:39092  
TITLE: Crystal structure of 1,3-diisopropyl-4,5-dimethylimidazolium tetramethoxyborate, [C11H21N2][B(OCCH3)4]  
AUTHOR(S): Kuhn, N.; Steimann, M.; Weyers, G.  
CORPORATE SOURCE: Universitat Tübingen, Institut für Anorganische Chemie, Tübingen, D-72076, Germany  
Zeitschrift fuer Kristallographie - New Crystal Structures (2001), 216(2), 315-317  
CODEN: ZKNSFT; ISSN: 1433-7266  
PUBLISHER: R. Oldenbourg Verlag  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The title compound is triclinic, space group P.hivin.1, a 8.417(1), b 15.849(4), c 16.387(5) Å, α 61.37(1)°, β 85.73(2)°, γ 84.88(1)°, Z = 2, Rgt(F) = 0.057, wRref(F2) = 0.161, T = 293 K. Atomic coordinates are given. The shortest C-O distances is 3.007 Å.  
IT 343781-24-8  
RL: PRP (Properties)  
(crystal structure of)  
RN 343781-24-8 CAPLUS  
CN 1H-Imidazolium, 4,5-bis(1-methylethyl)-, tetramethoxyborate(1-)  
(9CI) (CA INDEX NAME)

CM 1  
CRN 200803-10-7  
CMF C11 H21 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2  
CRN 15841-16-4  
CMF C4 H12 B O4  
CCI CCS



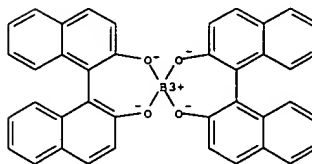
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

L12 ANSWER 38 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE  
 FORMAT

L12 ANSWER 39 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:306245 CAPLUS  
 DOCUMENT NUMBER: 135:76743  
 TITLE: New Methods of Resolution and Purification of Racemic and Diastereomeric Amino Alcohol Derivatives Using Boric Acid and Chiral 1,1'-Bi-2-naphthol  
 AUTHOR(S): Periasamy, Mariappan; Kumar, Nangunoori Sampath; Sivakumar, Sangarappan; Rao, Vutukuri Dharma; Ramanathan, C. Ramara; Venkatraman, Lakshmanan  
 CORPORATE SOURCE: School of Chemistry, University of Hyderabad, Hyderabad, 500 046, India  
 SOURCE: Journal of Organic Chemistry (2001), 66(11), 3829-3833  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 135:76743  
 AB Resolution of racemic amino alc. derivs. is readily achieved to obtain enantiomerically enriched compds. using chiral 1,1'-bi-2-naphthol and boric acid in solvents such as MeCN, THF, and MeOH. Some of the intermediate ammonium borate complexes were also characterized by X-ray diffraction methods.  
 IT 347842-11-9P 347842-12-OP 347842-13-1P  
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (resolution and purification of racemic and diastereomeric amino alc. derivs. using boric acid and chiral 1,1'-bi-2-naphthol)  
 RN 347842-11-9 CAPLUS  
 CN Borate(1-), bis[[1,1'-binaphthalene]-2,2'-diolato(2-)- $\kappa$ O, $\kappa$ O']-, (T-4)-, hydrogen, compd. with 1-(2-methoxycyclohexyl)piperidine (1:1) (9CI) (CA INDEX NAME)

CH 1

CRN 347842-10-8  
 CMF C40 H24 B O4 . H  
 CCI CCS

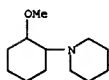


● H<sup>+</sup>

CH 2

L12 ANSWER 39 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

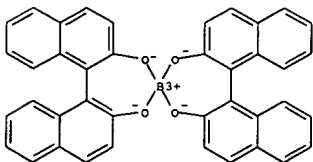
CRN 347841-84-3  
 CMF C12 H23 N O



RN 347842-12-0 CAPLUS  
 CN Borate(1-), bis[[1,1'-binaphthalene]-2,2'-diolato(2-)- $\kappa$ O, $\kappa$ O']-, (T-4)-, hydrogen, compd. with (2R)- $\alpha,\alpha$ -diphenyl-2-pyrrolidinemethanol (1:1) (9CI) (CA INDEX NAME)

CH 1

CRN 347842-10-8  
 CMF C40 H24 B O4 . H  
 CCI CCS

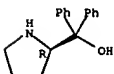


● H<sup>+</sup>

CH 2

CRN 22348-32-9  
 CMF C17 H19 N O

Absolute stereochemistry. Rotation (+).

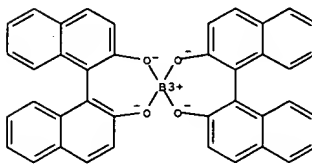


RN 347842-13-1 CAPLUS  
 CN Borate(1-), bis[[1,1'-binaphthalene]-2,2'-diolato(2-)- $\kappa$ O, $\kappa$ O']-

L12 ANSWER 39 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 , (T-4)-, hydrogen, compd. with acetonitrile and  $\alpha$ -(1-methylethyl)-2-phenyl-1-pyrrolidineethanol (1:1:1) (9CI) (CA INDEX NAME)

CH 1

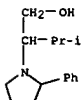
CRN 347842-10-8  
 CMF C40 H24 B O4 . H  
 CCI CCS



● H<sup>+</sup>

CH 2

CRN 347841-85-4  
 CMF C15 H23 N O



CH 3

CRN 75-05-8  
 CMF C2 H3 N

H<sub>3</sub>C—C≡N

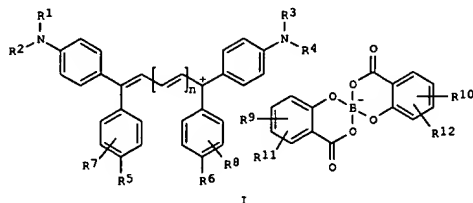
REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE  
 FORMAT



L12 ANSWER 40 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2000:762034 CAPLUS  
 DOCUMENT NUMBER: 133:323002  
 TITLE: Polymethine near infrared-absorbing dyes with high solubility for organic solvents  
 INVENTOR(S): Nakanishi, Isao; Saito, Nao  
 PATENT ASSIGNEE(S): Yamada Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKOQAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000302992	A2	20001031	JP 1999-152426	19990420
PRIORITY APPLN. INFO.:			JP 1999-152426	19990420

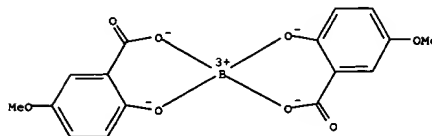
OTHER SOURCE(S): MARPAT 133:323002  
 GI



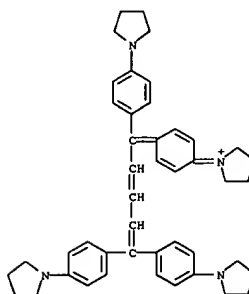
AB Title polymethine dyes are shown as I (R1-R4 = H, monovalent organic residue; R1 and R2, or R3 and R4 may form ring; terminals of R1-R4 may form ring with C atoms in o-positions for N atoms bonded to aromatic groups; R5-R8 = H, halo, monovalent organic residue; R9-R12 = H, OH, monovalent organic residue; n = 0-3). The dyes are useful for near IR-absorbing filters, photothermal conversion materials, etc. Thus, 1,5-bis(p-dimethylaminophenyl)-1,5-bis(p-tolyl)-2,4-pentadienol bis[3,5-bis(tert-butylsalicyl)]borate showed  $\lambda_{max}$  814.5 nm and solubility 1.3% for acetone and 1.4% for CHCl<sub>3</sub>.  
 IT 303044-76-0P 303044-82-8P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polymethine salicylborate near IR-absorbing dyes with high solubility for organic solvents)  
 RN 303044-76-0 CAPLUS  
 CN Pyrrolidinium, 1-[4-[1,5,5-tris(4-(1-pyrrolidinyl)phenyl)-2,4-pentadienylidene]-2,5-cyclohexadien-1-ylidene]-, (T-4)-bis[2-(hydroxy-

L12 ANSWER 40 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 (T-4)-bis[2-(hydroxybenzoato(2-)-o)]borate(1-) (9CI) (CA INDEX NAME)

CH 1  
 CRN 303044-75-9  
 CMF C16 H12 B O8  
 CCI CCS



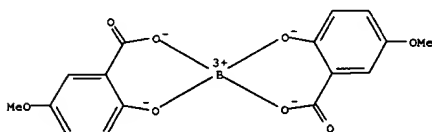
CH 2  
 CRN 162495-28-5  
 CMF C45 H51 N4



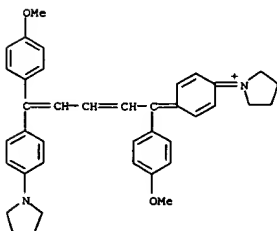
RN 303044-82-8 CAPLUS  
 CN Pyrrolidinium, 1-[4-[1,5-bis(4-methoxyphenyl)-5-[4-(1-pyrrolidinyl)phenyl]-2,4-pentadienylidene]-2,5-cyclohexadien-1-ylidene]-, (T-4)-bis[2-(hydroxybenzoato(2-)-o)]borate(1-) (9CI) (CA INDEX NAME)

CH 1  
 CRN 303044-75-9

L12 ANSWER 40 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 CMF C16 H12 B O8  
 CCI CCS



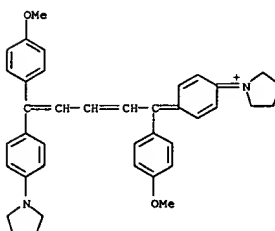
CH 2  
 CRN 303038-93-9  
 CMF C39 H41 N2 O2



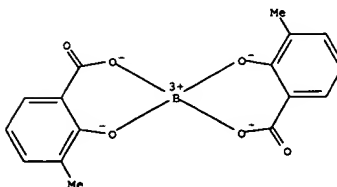
IT 303044-86-2  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (polymethine salicylborate near IR-absorbing dyes with high solubility for organic solvents)  
 RN 303044-86-2 CAPLUS  
 CN Pyrrolidinium, 1-[4-[1,5-bis(4-methoxyphenyl)-5-[4-(1-pyrrolidinyl)phenyl]-2,4-pentadienylidene]-2,5-cyclohexadien-1-ylidene]-, (T-4)-bis[2-(hydroxybenzoato(2-)-o)]borate(1-) (9CI) (CA INDEX NAME)

CH 1  
 CRN 303038-93-9  
 CMF C39 H41 N2 O2

L12 ANSWER 40 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



CH 2  
 CRN 258875-08-0  
 CMF C16 H12 B O6  
 CCI CCS

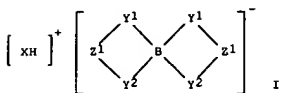


L12 ANSWER 41 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:657820 CAPLUS  
DOCUMENT NUMBER: 133:253286  
TITLE: Manufacture of latent crosslinking catalyst for thermosetting resins  
INVENTOR(S): Go, Yoshiyuki; Miyake, Sumiya  
PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKKXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000254513	A2	20000919	JP 1999-59915	19990308
PRIORITY APPLN. INFO.:			JP 1999-59915	19990308

OTHER SOURCE(S): MARPAT 133:253286  
GI



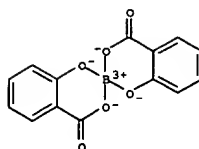
AB The latent catalysts I are prepared by reacting tertiary amines or heterocyclic N-containing compds., with Y1Z1Y2 proton donors, and boric acid in solvents (Z1 = organic groups having substituents Y1, Y2; Y1, Y2 = groups that release proton and link and chelate with B atom; X = tertiary amines or heterocyclic N-containing compds.). Stirring boric acid 12.4, salicylic acid 55.2, MeOH 276, and water 248 g for 30 min, adding a solution containing MeOH 378, water 378, and DBU 30.4 g and stirring for 1 h gave 80.3 g a white crystal onium borate of I with m.p. 128-130°.

IT 233744-78-09  
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)  
(manufacture of latent crosslinking catalyst for thermosetting resins)

RN 233744-78-0 CAPLUS  
CN Borate(1-), bis[2-(hydroxy-κO)benzoato(2-)-κO]-, (T-4)-, hydrogen, compd. with 2-methyl-1H-imidazole (1:1) (9CI) (CA INDEX NAME)

CM 1  
CRN 22450-97-1  
CMF C14 H8 B O6 . H  
CCI CCS

L12 ANSWER 41 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● H<sup>+</sup>

CM 2

CRN 693-98-1  
CMF C4 H6 N2



L12 ANSWER 42 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN

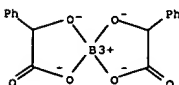
ACCESSION NUMBER: 2000:626447 CAPLUS  
DOCUMENT NUMBER: 134:36285  
TITLE: Structural characterization of borate esters in which sodium acts as a support to the structural framework  
AUTHOR(S): Bishop, Maximilienne; Bott, Simon G.; Barron, Andrew R.  
CORPORATE SOURCE: Department of Chemistry, Rice University, Houston, TX, 77005, USA  
SOURCE: Dalton (2000), (18), 3100-3105  
CODEN: DALTFG  
PUBLISHER: Royal Society of Chemistry  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 134:36285

AB The borate ester deriva. of phenol, trans-cyclohexane-1,2-diol and mandelic acid were prepared from NaBH<sub>4</sub> and structurally characterized by x-ray crystallog. The product from the reaction with phenol appears as a crystallog. disorder of [(THF)2Na(B(OPh)3H)]2 (1) and [(THF)2Na(B(OPh)(OH2)H)]2 (2). Both compds. are dimeric with bridging borate groups linking the Na cations. The reaction with trans-cyclohexane-1,2-diol in DMSO yields the infinite polymer, [(DMSO)Na(B(O2C6H10)2)]<sub>n</sub> (3), in which the Na cations link [B(O2C6H10)2]<sup>-</sup> anions. The unusual 5-coordinate geometry of the Na is completed by the coordination of a disordered DMSO mol. In a similar manner, mandelic acid reacts to form an infinite lattice [Na(py)2][B(O2CC(O)Ph)2] (4), in which each Na is coordinated to three [B(O2CC(O)Ph)2]<sup>-</sup> anions, one through two interactions involving the alkoxide and carboxylate groups of a chelate mandelic acid, and two interactions involving the carboxylate groups of adjacent anions. The role of the Group 1 cation in supporting the structural framework of the borate anions is discussed.

IT 312264-61-2P  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and crystal structure of)

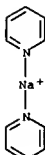
RN 312264-61-2 CAPLUS  
CN Sodium(1+), bis(pyridine)-, (T-4)-bis[α-(hydroxy-κO)benzeneacetato(2-)-κO]borate(1-) (9CI) (CA INDEX NAME)

CM 1  
CRN 312264-60-1  
CMF C16 H12 B O6  
CCI CCS



CM 2  
CRN 119327-39-8  
CMF C10 H10 N2 Na  
CCI CCS

L12 ANSWER 42 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

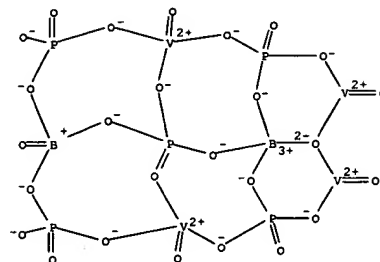


REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L12 ANSWER 43 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2000:428843 CAPLUS  
 DOCUMENT NUMBER: 133:159251  
 TITLE: Synthesis and Characterization of the Layered Vanadium Borophosphate  
 (Imidazolium)3.8(H3O)1.2[(VO)4(BO)2(PO4)5]·0.3H2O  
 AUTHOR(S): Bontchev, Ranko P.; Do, Junghwan; Jacobson, Allan J.  
 CORPORATE SOURCE: Department of Chemistry, University of Houston, Houston, TX, 77204-5641, USA  
 SOURCE: Inorganic Chemistry (2000), 39(15), 3320-3324  
 CODEN: INOCAJ; ISSN: 0020-1669  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The 1st layered V borophosphate (Imidazolium)3.8(H3O)1.2[(VO)4(BO)2(PO4)5]·0.3H2O (I) was synthesized hydrothermally and characterized by chemical anal., IR and Raman spectroscopy, and thermogravimetric and magnetic measurements. The compound crystallizes in the monoclinic space group C2/c, a 9.4737(5) Å, b 22.1444(12) Å, c 17.2192(13) Å, β 105.936(1)°, Z = 4. The structure contains a novel borophosphate secondary building unit, [B2P5O22], in which two BP2O10 trimers are linked by an addnl. PO4 tetrahedron. These units are connected by V(IV)2O8 dimers and V(IV)O5 square pyramids to form layers. The space between the layers is filled by disordered imidazolium and hydronium cations and H2O mol. that form a complex network of H bonds. A model for the interlayer disorder is proposed.  
 IT 287470-02-0P  
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation, crystal structure, antiferromagnetic exchange, vibrational spectra and thermal decomposition of)  
 RN 287470-02-0 CAPLUS  
 CN Vanadate(5-), [μ4-{dioxo[μ-{phosphato(3-)-κO:κO'}]tetrakis[phosphato(3-)-κO]diborato(13-)}]tetraoxotetra-, oxonium hydrogen, compd. with 1H-imidazole, hydrate (10:12:38:38:3) (9CI) (CA INDEX NAME)  
 CH 1  
 CRN 287470-81-9  
 CMF B2 O26 P5 V4 . 6/5 H3 O . 19/5 H  
 CCI CCS

L12 ANSWER 43 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

●19/5 H<sup>+</sup>

●6/5 OH<sub>3</sub><sup>+</sup>

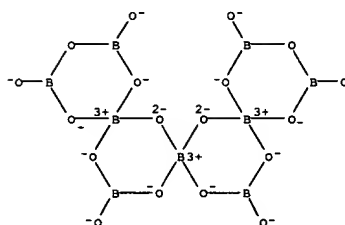
CM 2  
 CRN 288-32-4  
 CMF C3 H4 N2



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 44 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2000:278304 CAPLUS  
 DOCUMENT NUMBER: 133:37252  
 TITLE: Guanidinium and imidazolium borates containing the first examples of an isolated nonaborate oxoanion: [B9O12(OH)6]3-  
 AUTHOR(S): Schubert, David M.; Visi, Mandana Z.; Knobler, Carolyn  
 CORPORATE SOURCE: B.  
 SOURCE: U.S. Borax Inc., Valencia, CA, 91355-1847, USA  
 Inorganic Chemistry (2000), 39(11), 2250-2251  
 CODEN: INOCAJ; ISSN: 0020-1669  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The guanidinium and imidazolium borates [C(NH2)3]3[B9O12(OH)6] (I) and [C3H5N2]3[B9O12(OH)6] (II) were prepared and characterized by single crystal x-ray diffraction anal. These borates contain the 1st examples of the isolated nonaborate anion, [B9O12(OH)6]3-. These borates have resolved oxide formulas [C(NH2)3]2O·3B2O3·2H2O and [C3H5N2]2O·3B2O3·2H2O. The [B9O12(OH)6]3- anion found in each consists of four B3O3 rings sharing three tetrahedral B centers in a linear arrangement. The remaining six B centers are trigonal with one attached hydroxyl group. The two inner B3O3 rings each contain one trigonal and two tetrahedral B's, and the two outer rings each contain one tetrahedral and two trigonal B's.  
 IT 273750-78-0P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and crystal structure of)  
 RN 273750-78-0 CAPLUS  
 CN Borate(9-), bis[μ-{orthoborato(3-)-κO:κO'}]di-μ-oxobis[μ-oxotetraoxodiborato(4-)]tri-, nonahydrogen, compd. with 1H-imidazole (1:9) (9CI) (CA INDEX NAME)  
 CH 1  
 CRN 273750-76-8  
 CMF B9 O18 . 9 H  
 CCI CCS

L12 ANSWER 44 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



●9 H<sup>+</sup>

CM 2  
 CRN 288-32-4  
 CMF C3 H4 N2

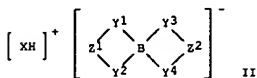


REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 45 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2000:37940 CAPLUS  
 DOCUMENT NUMBER: 132:79372  
 TITLE: Thermosetting novolak resin compositions with good curability, and molding materials therefrom  
 INVENTOR(S): Oka, Wataru; Orihara, Tamotsu  
 PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKOXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000017145	A2	20000118	JP 1998-184487	19980630
PRIORITY APPLN. INFO.:			JP 1998-184487	19980630

OTHER SOURCE(S): MARPAT 132:79372  
 GI



AB The compns. contain novolak resins, hexamethylenetetramine (I), and onium borates II (X = N-containing heterocyclic compound; Z1, Z2 = aromatic or alicyclic

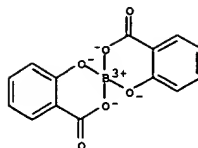
group; Y1-Y4 = proton donor group residue). Thus, novolak resin 100, I 16, II (X = DBU, Y1Z1Y2 = Y3Z2Y4 = O-o-C6H4CO2) 8 parts, and fillers are mixed and transfer-molded to give a test piece showing Barcol hardness 68 and bending strength 102 and 63 MPa, at room temperature and 120°, resp.

IT 233744-78-0  
 RL: CAT (Catalyst use); USES (Uses)  
 (curing accelerator; thermosetting novolak resin compns. with good curability)

RN 233744-78-0 CAPLUS  
 CN Borate(1-), bis[2-(hydroxy-κO)benzoato(2-)-κO]-, (T-4)-, hydrogen, compd. with 2-methyl-1H-imidazole (1:1) (9CI) (CA INDEX NAME)

CM 1  
 CRN 22450-97-1  
 CMF C14 H8 B O6 . H  
 CCI CCS

L12 ANSWER 45 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● H<sup>+</sup>

CM 2  
 CRN 693-98-1  
 CMF C4 H6 N2



L12 ANSWER 46 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:536707 CAPLUS  
 DOCUMENT NUMBER: 131:299232  
 TITLE: Resolution of trans-(±)-2-(pyrrolidinyl)cyclohexanol and its methyl ether using boric acid and chiral 1,1'-bi-2-naphthol  
 AUTHOR(S): Periasamy, Mariappan; Ramanathan, C. Ramaraj; Kumar, Mangunoori Sampath  
 CORPORATE SOURCE: School of Chemistry, University of Hyderabad, Hyderabad, 500 046, India  
 SOURCE: Tetrahedron: Asymmetry (1999), 10(12), 2307-2310  
 CODEN: TASYE3; ISSN: 0957-4166  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

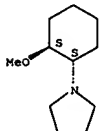
AB Trans-(±)-2-(pyrrolidinyl)cyclohexanol and its Me ether were resolved using chiral 1,1'-bi-2-naphthol and boric acid in THF or CH3CN. X-ray structural anal. was carried out for a diastereomeric complex obtained using the Me ether.

IT 247114-34-7P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (resolution of trans-(pyrrolidinyl)cyclohexanol and its Me ether using boric acid and chiral binaphthol)

RN 247114-34-7 CAPLUS  
 CN Borate(1-), bis[(1R)-[1,1'-binaphthalene]-2,2'-diolato(2-)-κO,κO']-, (T-4)-, hydrogen, compd. with acetonitrile and 1-[(1S,2S)-2-methoxycyclohexyl]pyrrolidine (1:3:1) (9CI) (CA INDEX NAME)

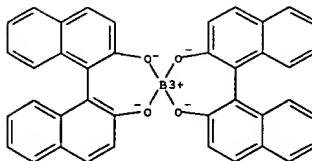
CM 1  
 CRN 247024-88-0  
 CMF C11 H21 N O

Absolute stereochemistry. Rotation (+).



CM 2  
 CRN 161651-51-0  
 CMF C40 H24 B O4 . H  
 CCI CCS

L12 ANSWER 46 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● H<sup>+</sup>

CM 3  
 CRN 75-05-8  
 CMF C2 H3 N

H3C-C≡N

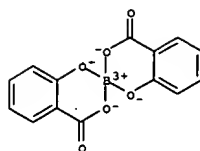
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE  
 FORMAT

L12 ANSWER 47 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:481505 CAPLUS  
 DOCUMENT NUMBER: 131:130718  
 TITLE: Epoxy resin compositions for prepregs and laminated circuit boards  
 INVENTOR(S): Go, Yoshiyuki; Miyake, Sumiya; Nagata, Hiroshi; Okubo,  
 Akiko; Kobayashi, Minoru  
 PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JI00AF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11209583	A2	19990803	JP 1998-11829	19980123
PRIORITY APPLN. INFO.:			JP 1998-11829	19980123

OTHER SOURCE(S): MARPAT 131:130718  
 AB Title epoxy resin comps., which is stable at room temperature and fat curing upon heating, comprise an epoxy resin, a polyamine curing agent, and a curing accelerator of an onium borate. Thus a bisphenol A-based epoxy resin 100 parts, diaminodiphenylmethane 0.2 parts, dicyandiamide 0.3 parts, and DBU salt of 2-hydroxybenzoic acid boron complex 2.5 parts were mixed to give an epoxy composition of this invention. Two pieces of glass cloths were impregnated with the above composition to two prepregs which were laminated with an printed circuit board by vacuum compression while heating to give a laminated board.  
 IT 233744-78-0 CAPLUS  
 233744-79-1 233744-80-4  
 RL: CAT (Catalyst use); USES (Uses)  
 (epoxy resin comps. for prepregs and laminated circuit boards)  
 RN 233744-78-0 CAPLUS  
 CN Borate(1-), bis[2-(hydroxy- $\kappa$ O)benzoato(2-)- $\kappa$ O]-, (T-4)-, hydrogen, compd. with 2-methyl-1H-imidazole (1:1) (9CI) (CA INDEX NAME)  
 CH 1  
 CRN 22450-97-1  
 CMF C14 H8 B O6 . H  
 CCI CCS

L12 ANSWER 47 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

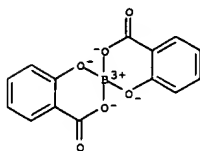


● H<sup>+</sup>

CH 2  
 CRN 693-98-1  
 CMF C4 H6 N2



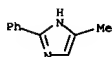
RN 233744-79-1 CAPLUS  
 CN Borate(1-), bis[2-(hydroxy- $\kappa$ O)benzoato(2-)- $\kappa$ O]-, (T-4)-, hydrogen, compd. with 4-methyl-2-phenyl-1H-imidazole (1:1) (9CI) (CA INDEX NAME)  
 CH 1  
 CRN 22450-97-1  
 CMF C14 H8 B O6 . H  
 CCI CCS



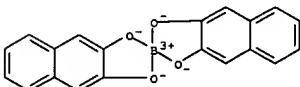
● H<sup>+</sup>

L12 ANSWER 47 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CH 2  
 CRN 827-43-0  
 CMF C10 H10 N2



RN 233744-80-4 CAPLUS  
 CN Borate(1-), bis[2,3-naphthalenediolato(2-)- $\kappa$ O, $\kappa$ O']-, (T-4)-, hydrogen, compd. with 2-methyl-1H-imidazole (1:1) (9CI) (CA INDEX NAME)  
 CH 1  
 CRN 47422-29-7  
 CMF C20 H12 B O4 . H  
 CCI CCS



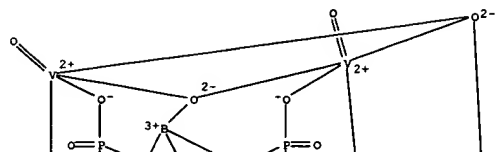
● H<sup>+</sup>

CH 2  
 CRN 693-98-1  
 CMF C4 H6 N2



L12 ANSWER 48 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:470222 CAPLUS  
 DOCUMENT NUMBER: 131:208123  
 TITLE: Templated synthesis of vanadium borophosphate cluster anions  
 AUTHOR(S): Bontchev, Ranko P.; Do, Junghwan; Jacobson, Allan J.  
 CORPORATE SOURCE: Department of Chemistry, University of Houston, Houston, TX, 77204-5641, USA  
 SOURCE: Angewandte Chemie, International Edition (1999), 38(13/14), 1937-1940  
 CODEN: ACIEF5; ISSN: 1433-7851  
 PUBLISHER: Wiley-VCH Verlag GmbH  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Hydrothermal reactions of V2O3, H3BO3 and H3PO4 at 180° for 3 days gave crystals of (NH4)6[(VO)2BP2O10]4·nH2O (1: n = 2, 6, 14), Na14[Na3[(VO)2BP2O10]5]·nH2O (2) and Al7[Al3[(VO)2BP2O10]6]·nH2O (3; A = NH4, K, Rb, Cs). The crystal structures of 1 (n = 6), 2 and 3 (A = NH4) and the magnetic susceptibility of 3 (indicating antiferromagnetic interactions) are reported. Thermogravimetric anal. of 1-3 indicate structure collapse upon loss of H2O with eventual formation of glassy matrixes composed of VO2, F5O5, B2O3 and M2O (M = Na, K, Rb, Cs).  
 IT 241125-89-3P  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)  
 (Preparation and crystal and mol. structure and thermal decomposition)  
 RN 241125-89-3 CAPLUS  
 CN Vanadate(12-), tetraborateocta- $\mu$ 3-oxooctaoxooctakis[ $\mu$ 3-[phosphato(3-)- $\kappa$ O: $\kappa$ O': $\kappa$ O'']octa-, dodecahydrogen, compd. with piperazine (1:6), hexahydrate (9CI) (CA INDEX NAME)  
 CH 1  
 CRN 241125-88-2  
 CMF B4 O48 P8 V8 . 12 H  
 CCI CCS

PAGE 1-A



\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

PAGE 4-A

●12 H<sup>+</sup>

CM 2

CRN 110-85-0  
CMF C4 H10 N2

IT 241125-95-1P 241125-96-2P  
 RL: PEP (Physical, engineering or chemical process); RCT (Reactant); SPN  
 (Synthetic preparation); PREP (Preparation); PROC (Process); RACT

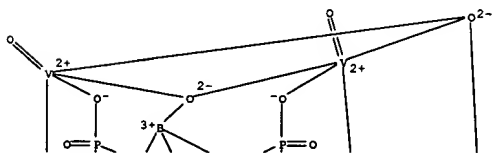
CRN 110-85-0  
CMF C4 H10 N2

RN 241125-96-2 CAPLUS  
 CN Vanadate(12-), tetraborateocta-μ3-oxooctaoxooctakis[μ3-(phosphato(3-)-κO:κO':κO'')]octa-, dodecahydrogen, compd. with piperazine (1:6), tetradecahydrate (9CI) (CA INDEX NAME)

CM 1

CRN 241125-88-2  
CMF B4 O48 P8 V8 . 12 H  
CCI CCS

PAGE 1-A



\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

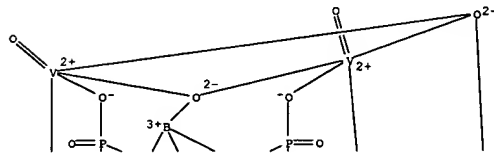
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

(Reactant or reagent)  
 (prepn. and thermal decompn.)  
 RN 241125-95-1 CAPLUS  
 CN Vanadate(12-), tetraborateocta-μ3-oxooctaoxooctakis[μ3-(phosphato(3-)-κO:κO':κO'')]octa-, dodecahydrogen, compd. with piperazine (1:6), dihydrate (9CI) (CA INDEX NAME)

CM 1

CRN 241125-88-2  
CMF B4 O48 P8 V8 . 12 H  
CCI CCS

PAGE 1-A



\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

PAGE 4-A

●12 H<sup>+</sup>

CM 2

PAGE 4-A

●12 H<sup>+</sup>

CM 2

CRN 110-85-0  
CMF C4 H10 N2

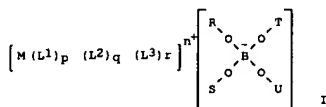
REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L12 ANSWER 49 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:463430 CAPLUS  
 DOCUMENT NUMBER: 131:151739  
 TITLE: Metal ion source for improving image-fixability  
 INVENTOR(S): Okubo, Kimihiko; Asatake, Atsushi  
 PATENT ASSIGNEE(S): Konica Co., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKKXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11199790	A2	19990727	JP 1998-12169	19980106

PRIORITY APPLN. INFO.: JP 1998-12169 19980106

OTHER SOURCE(S): MARPAT 131:151739  
 GI



AB The metal ion source for improving dye-fixability is represented by a general formula I (M = metal ion; L1-3 = ligand; p = 0-3; q = 0-2; r = 0, 1; n = 1-3; R, S, T, U = H, substituent; 2 of R, S, T, U may form ring). The metal ion source shows improved storage stability.

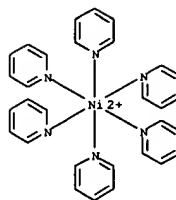
IT 235782-66-8  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (metal ion source with improved storage stability for improving image-fixability)

RN 235782-66-8 CAPLUS  
 CN Nickel(2+), hexakis(pyridine)-, (OC-6-11)-, bis[(T-4)-bis[1,2-benzenediolato(2-)-κO,κO']borate(1-)] (9CI) (CA INDEX NAME)

CM 1

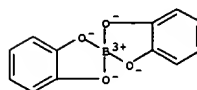
CRN 20037-72-3  
 CHF C30 H30 N6 Ni  
 CCI CCS

L12 ANSWER 49 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



CM 2

CRN 16986-25-7  
 CHF C12 H8 B O4  
 CCI CCS



L12 ANSWER 50 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:407164 CAPLUS  
 DOCUMENT NUMBER: 131:103041  
 TITLE: Storage-stable epoxy resin compositions containing ammonium borates as latent crosslinking accelerators  
 INVENTOR(S): Miyake, Sumiya; Go, Yoshiyuki; Nagata, Hiroshi; Okubo,  
 PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKKXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11171981	A2	19990629	JP 1997-340126	19971210
JP 3690710	B2	20050831		

PRIORITY APPLN. INFO.: JP 1997-340126 19971210

OTHER SOURCE(S): MARPAT 131:103041

GI For diagram(s), see printed CA issue.  
 AB Title compns., useful for elec. an electronic devices, etc., contain hardeners and X+ BY1Y2Y3Y4- (X+ = (substituted) ammonium; 2l of Y1-Y4 = H+-donating group residue after releasing 1 H+, the rest of Y1-Y4 = aromatic, heterocyclic, or aliphatic group) or I (Y9-Y10 are same as Y1-Y4;

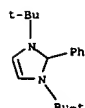
Y11-Y12 = H+-donating group residue after release of H+). Thus, o-cresol novolak epoxy resin (EOCN 102065) 67, phenol novolak 33, pulverized fused silica 300, carnauba wax 2, and PHAN+ (BzO)4B- 3.1 part was mixed and roll-kneaded at 90° for 5 min to give title composition having initial spiral flow 83 cm and 79 cm after 3-day storage at 40°.

IT 229316-58-0 229316-71-6  
 RL: CAT (Catalyst use); USES (Uses)  
 (rapidly curable storage-stable epoxy resin compns. containing ammonium borates as latent crosslinking accelerators)

RN 229316-58-0 CAPLUS  
 CN 1H-Imidazolium, 1,3-bis(1,1-dimethylethyl)-2-phenyl-, (T-4)-bis[1,2-benzenediolato(2-)-κO,κO']borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 229316-58-9  
 CHF C17 H25 N2

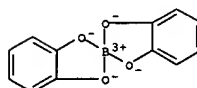


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L12 ANSWER 50 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CM 2

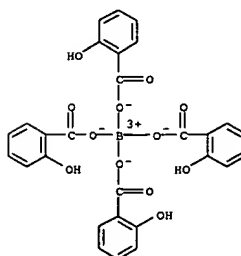
CRN 16986-25-7  
 CHF C12 H8 B O4  
 CCI CCS



RN 229316-71-6 CAPLUS  
 CN Pyridinium, 1-ethyl-, tetrakis(2-hydroxybenzoato-κO)borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 229316-70-5  
 CHF C28 H20 B O12  
 CCI CCS



CM 2

CRN 15302-96-2  
 CHF C7 H10 N



L12 ANSWER 51 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:163192 CAPLUS  
 DOCUMENT NUMBER: 130:245332  
 TITLE: Electrolytic capacitor driving electrolytic solution containing borodisalicylate  
 INVENTOR(S): Uramoto, Masahide; Nakano, Minoru; Sano, Mikio; Takahashi, Isao; Fukuda, Mitsuru  
 PATENT ASSIGNEE(S): Toyama Yakuin Kogyo K. K., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKOXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11067604	A2	19990309	JP 1997-225608	19970808

PRIORITY APPLN. INFO.: JP 1997-225608 19970808

OTHER SOURCE(S): MARPAT 130:245332  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The solution contains a borodisalicylic acid amine salt, as an electrolyte, comprising (A) a borodisalicylic acid backbone I and (2) an amine compound backbone NR<sub>1</sub>R<sub>2</sub>R<sub>3</sub>, II, or III (R<sub>1</sub>-5 = H, C1-5 alkyl; C1-7 alkylamino, cyclic group). The solution shows low resistivity, heat stability, and less odor.

IT 221332-52-1 221332-56-5

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(electrolytic capacitor driving solution containing borodisalicylic acid amine derivative)

RN 221332-52-1 CAPLUS

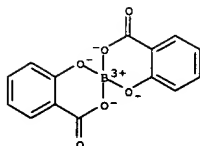
CN Borate(1-), bis[2-(hydroxy-κO)benzoato(2-)-κO]-, (T-4)-, hydrogen, compd. with 1,2-dimethyl-1H-imidazole (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 22450-97-1

CMF C14 H8 B O6 . H

CCI CCS



● H<sup>+</sup>

CM 2

CRN 1739-84-0

CMF C5 H8 N2



RN 221332-56-5 CAPLUS

CN Pyrimidinium, 1,2-dimethyl-, (T-4)-bis[2-(hydroxy-κO)benzoato(2-)-κO]borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 221332-55-4

CMF C6 H9 N2

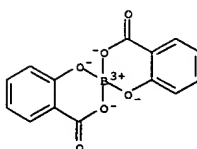


CM 2

CRN 38403-08-6

CMF C14 H8 B O6

CCI CCS



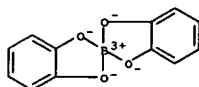


L12 ANSWER 52 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1999:139922 CAPLUS  
DOCUMENT NUMBER: 130:189140  
TITLE: Electrochromic system with coupled red-ox system and special anions  
INVENTOR(S): Berneth, Horst; Kostromine, Serguei  
PATENT ASSIGNEE(S): Bayer A.-G., Germany  
SOURCE: PCT Int. Appl., 93 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9909111	A1	19990225	WO 1998-EP4909	19980806
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, BG, BR, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, CA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 19735733	A1	19990225	DE 1997-19735733	19970818
CA 2300131	AA	19990225	CA 1998-2300131	19980806
AU 9893393	A1	19990308	AU 1998-93393	19980806
AU 733812	B2	20010524		
EP 1015524	A1	20000705	EP 1998-946284	19980806
R: AT, DE, ES, FR, GB, IT, NL, SE, IE				
JP 2001515120	T2	20010918	JP 2000-509781	19980806
US 6417951	B1	20020709	US 2000-485758	20000215
US 2002197486	A1	20021226	US 2002-150335	20020517
US 6767481	B2	20040727		
PRIORITY APPLN. INFO.:			DE 1997-19735733	A 19970818
			WO 1998-EP4909	W 19980806
			US 2000-485758	A3 20000215

OTHER SOURCE(S): MARPAT 130:189140  
AB Electrochromic systems are described which comprise  $\geq 1$  reducible substance and  $\geq 1$  oxidizable substance interconnected via a covalent binding link. Preferably the anions have mol. wts.  $>200$  g/mol (most preferably  $>250$  g/mol) and/or are cage-type anions. Electrochromic fluids comprising  $\geq 1$  of the compds. in  $\geq 1$  inert solvent are also described, as are electrochromic devices (e.g., solar cells, windows, mirrors, sun roofs, and displays) using the fluids.  
IT 220624-16-8P  
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)  
(electrochromic materials with coupled red-ox systems and heavy and/or cage-type anions and devices using them)  
RN 220624-16-8 CAPLUS  
CN 4,4'-Bipyridinium, 1-[4-[3-(2-(1,2-dimethyl-1H-indol-3-yl)ethenyl)-2-methyl-1H-indol-1-yl]butyl]-1'-methyl-, bis[tetrabutoxyborate(1-)] (9CI) (CA INDEX NAME)  
CM 1

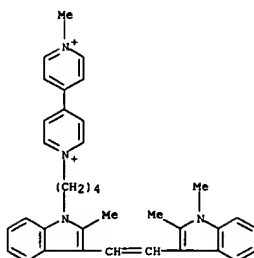
L12 ANSWER 53 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1999:82369 CAPLUS  
DOCUMENT NUMBER: 130:117629  
TITLE: Salts of the bis(catecholato)borate anion with organic cations  
AUTHOR(S): Clegg, William; Scott, Andrew J.; Lawlor, Fiona J.; Norman, Nicholas C.; Marder, Todd B.; Dai, Chaoyang; Nguyen, Paul  
CORPORATE SOURCE: Department of Chemistry, University of Newcastle upon Tyne, Newcastle upon Tyne, NE1 7RU, UK  
SOURCE: Acta Crystallographica, Section C: Crystal Structure Communications (1998), C54(12), 1875-1880  
CODEN: ACSCEI; ISSN: 0108-2701  
Munksgaard International Publishers Ltd.  
PUBLISHER: Journal  
DOCUMENT TYPE: English  
LANGUAGE: English  
AB In six salts with organic N and P cations [2-methylpyridinium bis(pyrocatecholato-O,O')borate, C<sub>6</sub>H<sub>8</sub>N<sup>+</sup>·C<sub>12</sub>H<sub>8</sub>BO<sub>4</sub><sup>-</sup>, (1); 4-methylpyridinium bis(pyrocatecholato-O,O')borate, C<sub>6</sub>H<sub>8</sub>N<sup>+</sup>·C<sub>12</sub>H<sub>8</sub>BO<sub>4</sub><sup>-</sup>, (2) and (3) (two polymorphs); 1,10-phenanthroline bis(pyrocatecholato-O,O')borate, C<sub>12</sub>H<sub>8</sub>N<sub>2</sub><sup>+</sup>·C<sub>12</sub>H<sub>8</sub>BO<sub>4</sub><sup>-</sup>, (4), and its CH<sub>2</sub>Cl<sub>2</sub> solvate, C<sub>12</sub>H<sub>8</sub>N<sub>2</sub><sup>+</sup>·C<sub>12</sub>H<sub>8</sub>BO<sub>4</sub><sup>-</sup>·CH<sub>2</sub>Cl<sub>2</sub>, (5), and trimethylphosphonium bis(pyrocatecholato-O,O')borate, C<sub>3</sub>H<sub>10</sub>P<sup>+</sup>·C<sub>12</sub>H<sub>8</sub>BO<sub>4</sub><sup>-</sup>, (6)], the bis(catecholato)borate anion has approx. D<sub>2d</sub> (42m) symmetry, with the central spiro-B atom distorted from regular tetrahedral coordination geometry by reduction of the two intra-ring O-B-O bond angles. The two chelate rings show small deviations from planarity by folding about the O...O axis. Ion pairs are formed by N-H...O H bonding in all five salts with N-based cations, but there is no H bonding in the phosphonium salt; the H bonding leads to slight elongation of the B-O bond involved. Crystallog. data are given.  
IT 30776-62-6, 2-Methylpyridinium bis(pyrocatecholato-O,O')borate  
RL: PRP (Properties)  
(crystal structure of)  
RN 30776-62-6 CAPLUS  
CN Borate(1-), bis[1,2-benzenediolato(2-)-κO,κO']-, (T-4)-, hydrogen, compd. with 2-methylpyridine (1:1) (9CI) (CA INDEX NAME)  
CM 1  
CRN 22450-98-2  
CMF C12 H8 B O4 . H  
CCI CCS



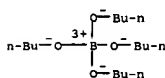
● H<sup>+</sup>

L12 ANSWER 52 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CRN 195328-26-8  
CMF C36 H38 N4



CM 2  
CRN 103624-08-4  
CMF C16 H36 B O4  
CCI CCS



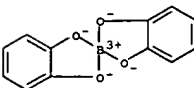
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE  
FORMAT

L12 ANSWER 53 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CM 2  
CRN 109-06-8  
CMF C6 H7 N



IT 219702-48-4, 4-Methylpyridinium bis(pyrocatecholato-O,O')borate  
RL: PRP (Properties)  
(crystal structure of polymorphs of)  
RN 219702-48-4 CAPLUS  
CN Borate(1-), bis[1,2-benzenediolato(2-)-κO,κO']-, (T-4)-, hydrogen, compd. with 4-methylpyridine (1:1) (9CI) (CA INDEX NAME)  
CM 1  
CRN 22450-98-2  
CMF C12 H8 B O4 . H  
CCI CCS



● H<sup>+</sup>

CM 2  
CRN 108-89-4  
CMF C6 H7 N

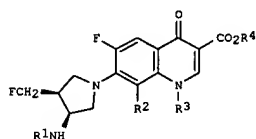


REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE  
FORMAT

L12 ANSWER 54 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1999:27822 CAPLUS  
 DOCUMENT NUMBER: 130:81423  
 TITLE: Preparation of cis-substituted fluoromethylpyrrolidine derivatives of 1,4-dihydro-4-oxoquinoline-3-carboxylic acid as antibacterial agents  
 INVENTOR(S): Takemura, Makoto; Takahashi, Hisashi; Ohki, Hitoshi; Kimura, Kenichi; Miyauchi, Rie; Takeda, Toshiyuki  
 PATENT ASSIGNEE(S): Daiichi Pharmaceutical Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 51 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NO.: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9858923	A1	19981230	WO 1998-JP2787	19980623
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MM, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9880387	A1	19990104	AU 1998-80387	19980623
ZA 9805466	A	19990120	ZA 1998-5466	19980623
EP 995744	A1	20000426	EP 1998-928627	19980623
EP 995744	B1	20030212		
R:	BE, CH, DE, FR, GB, IT, LI, NL, SE			
TW 382625	B	20000221	TW 1998-87110150	19980624
NO 9906390	A	20000224	NO 1999-6390	19991222
US 2002072608	A1	20020613	US 1999-446696	19991223
US 6656952	B2	20031202		
PRIORITY APPLN. INFO.:			JP 1997-166438	A 19970624
			JP 1998-54700	A 19980306
			WO 1998-JP2787	W 19980623

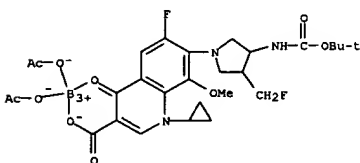
OTHER SOURCE(S): MARPAT 130:81423  
 GI



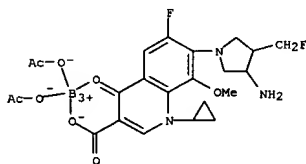
AB Quinolone derivs. represented by general formula (I; wherein R1 represents a hydrogen atom or an optionally substituted alkyl group having 1 to 6 carbon atoms; R2 represents a halogenomethoxyl or alkoxyl group; R3 represents an alkyl, alkenyl, halogenoalkyl, cyclic alkyl, heteroaryl, alkoxyl, or alkylamino group; R4 represents a hydrogen atom or Ph, acetoxymethyl, pivaloyloxymethyl, ethoxycarbonyl, choline, dimethylaminoethyl, 5-indanyl, phthalidiny, 5-alkyl-2-oxo-1,3-dioxol-4-ylmethyl, 3-acetoxy-2-oxobutyl, alkyl, alkoxymethyl, or phenylalkyl group), salts thereof, and hydrates thereof of both, having potent antimicrobial activities against various bacteria including resistant strains and being highly safe, are prepared. Thus, 327 mg 3-(S)-tert-butoxycarbonylamino-4-(5)-fluoromethylpyrrolidine and 400 µL Et3N were added to a solution of 345 mg 1-cyclopropyl-6,7-difluoro-1,4-dihydro-8-methoxy-4-oxoquinoline-3-carboxylic acid-BF2 chelate in 2 mL DMSO, followed by deprotection with concentrated HCl to give 47% I (R1 = R4 = H, R2 = OMe, R3 = cyclopropyl) (II). II showed min. inhibitory concentration of 50.03, 0.06, 0.013, 0.05, 0.05, 0.20, 0.10, 0.10, 0.013, 0.05, 0.10, 0.10, and 0.39 µg/mL against *Escherichia coli* M13H, *Shigella flexneri* 2A 5503, *Proteus vulgaris* 08061, *Pr. mirabilis* IFO-3849, *Serratia marcescens* 10100, *Pseudomonas aeruginosa* 32104, *Ps. aeruginosa* 32121, *Xanthomonas maltophilia* IID-1275, *Staphylococcus aureus* 209P, *St. epidermidis* 56500, *Streptococcus pyogenes* G-36, *Str. faecalis* ATCC-19433, and *St. aureus* 879307, resp. A capsule and a feed dispersant formulation containing II were prepared.

IT 218447-08-6P 218447-10-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of [cis-amino(fluoromethyl)pyrrolidinyl]-1,4-dihydro-4-oxoquinoline-3-carboxylic acid as antibacterial agents)

RN 218447-08-6 CAPLUS  
 CN Boron, bis(acetato-κO) [7-[(3S,4S)-3-amino-4-(fluoromethyl)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-8-methoxy-4-(oxo-κO)-3-quinolinecarboxylato-κO3]-, (T-4)- (9CI) (CA INDEX NAME)



RN 218447-10-0 CAPLUS  
 CN Boron, bis(acetato-κO) [7-[(3S,4S)-3-amino-4-(fluoromethyl)-1-pyrrolidinyl]-1-cyclopropyl-6-fluoro-1,4-dihydro-8-methoxy-4-(oxo-κO)-3-quinolinecarboxylato-κO3]-, (T-4)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Respiratory viral infections may be effectively prevented or treated by administering an aerosol spray comprising a polyoxometalate to the lungs. (Me3NH)5TaS1W10O40 had a selectivity index greater than 300 when evaluated in HIV-1 acutely infected primary human PBM cells and had no cytotoxicity to uninfected human PBM cells when evaluated up to 100 µM.

IT 131541-70-3  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(method and aerosol spray containing a polyoxometalate for treating and preventing respiratory viral infections)

RN 131541-70-3 CAPLUS

CN L-Histidine, tetracos-a-η-oxododecaxo[μ12-[tetrahydroxyborato(5-)-O:O]]dodecatungstate(5-) (9CI) (CA INDEX NAME)

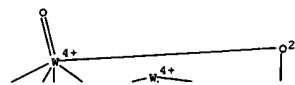
CM 1

CRN 12297-12-0

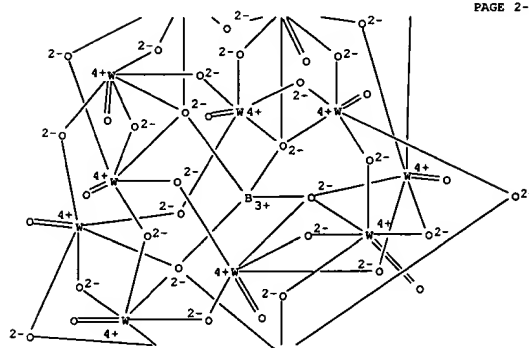
CMF B 040 W12 . 5 H

CCI CCS

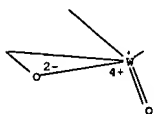
PAGE 1-A



PAGE 2-A



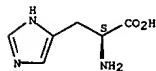
PAGE 3-A

 $\bullet S \quad H^+$ 

CM 2

CRN 71-00-1  
CMF C6 H9 N3 O2

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 100 THERE ARE 100 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

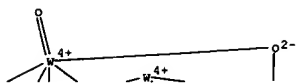
LZ 107 CAPLUS 1997:454680 CAS  
ACCESSION NUMBER: 1997:454680 CAPLUS  
DOCUMENT NUMBER: 127:183157  
TITLE: Chemical studies on the nonlinear optics of coordination compounds  
AUTHOR(S) You, Xiao-Zeng  
CORPORATE SOURCE: Coordination Chemistry Institute, State Key Laboratory  
  
SOURCE:  
Coordination Chemistry, Center Advanced Studies Sciences and Technology Microstructures, Nanjing University, Nanjing, 210093, Peop. Rep. China  
Journal of Photochemistry and Photobiology, A: Chemistry (1997), 106(1-3), 85-90  
CODEN: JPPCEJ; ISSN: 1010-6030

PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB There has been much progress in chemical studies on nonlinear optical polymer, inorg. and organometallic solid materials, but less for coordination compds. This paper present some of our recent research with emphasis on the possibility of incorporation advantages of both organic (high nonlineair optcal effect) and inorg. (stable large crystal parts into the form of coordination compds. (include orgnnc-inorg. salts) for nonlinearr optical applications.

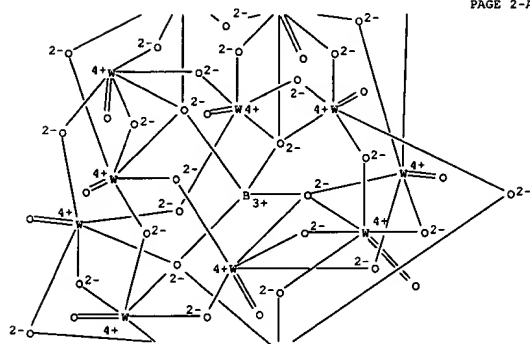
IT 194150-79-3 194150-80-6  
RL: PRP (Properties)  
(nonlinear optical properties of coordination compds.)  
RN 194150-79-3 CAPLUS  
CN Tungstate(5-), tetracosy-m-xododecaoxo[μ12-{tetrahydroxyborato(5)-κO:K O:K O':K O':K O'':kappa .O''':K O'':K O'''':K O'':K O'']}dodeca-, pentahydrogen, compd. With 1-methyl-2-pyrrolidinone (1:5) (9CI) (CA INDEX NAME)

CN 1  
CRN 12297-12-0  
CHF B O40 W12 . 5 H  
CCI CFS

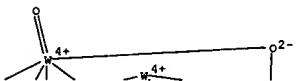
PAGE 1-A



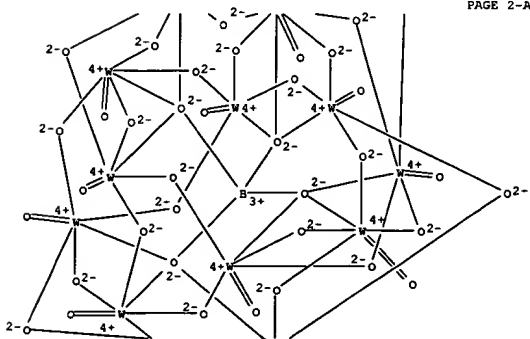
PAGE 2-A



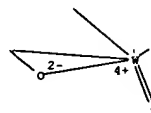
PAGE 1-A



PAGE 2-A



PAGE 3-A



●5 H<sup>+</sup>

CH 2

CRN 872-50-4  
CMF C5 H9 N O



```

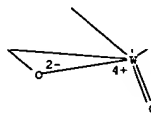
RN 194150-80-6 CAPIUS
CN Tungstate(5-), tetracosate-mu-oxododecaoxo[mu2-[tetrahydroxyborato(5-)-
KO:KO:KO:KO:KO:KO:Kappa
.O'':KO:KO:KO:KO:KO:KO]]dodeca-,
pentahydrogen, compd. with 1-methyl-2-pyrrolidinone (1:5), dihydrate
(9CI)
(CA INDEX NAME)

```

CM 1

CRN 12297-12-0  
CMF B 040 W12 . 5 H  
CCI CCS

PAGE 3-A



●5 H<sup>+</sup>

CM 2

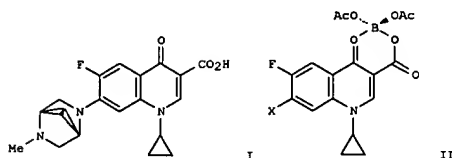
CRN 872-50-4  
CMF C5 H9 N O



L12 ANSWER 57 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1997:388730 CAPLUS  
 DOCUMENT NUMBER: 127:5021  
 TITLE: Process for preparation of  
 1-cyclopropyl-6-fluoro-1,4-  
 dihydro-7-[(1S,4S)-5-methyl-2,5-  
 diazabicyclo[2.2.1]hept-2-yl]-4-oxo-3-  
 quinolinecarboxylic acid [danofloxacin] and its salts  
 INVENTOR(S): Picornell Darder, Carlos; Gonzalez Hernandez, Pedro;  
 Salas Gonzalez, M. Luisa  
 PATENT ASSIGNEE(S): Quimica Sintetica, S.A., Spain  
 SOURCE: Span., 7 pp.  
 CODEN: SPOXAD  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Spanish  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ES 2092963	A1	19961201	ES 1995-782	19950412
ES 2092963	B1	19971216		
FI 9601583	A	19961013	FI 1996-1583	19960411
NO 9601442	A	19961014	NO 1996-1442	19960411
AT 960653	A	19980915	AT 1996-653	19960411
PRIORITY APPLN. INFO.:			ES 1995-782	A 19950412

OTHER SOURCE(S): CASREACT 127:5021  
 GI

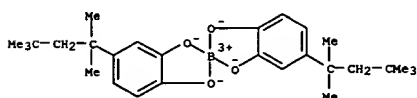


AB Title compound I and salts are prepared in 3 steps. Treatment of a Cl-4 alkyl  
 1-cyclopropyl-6-fluoro-7-chloro-1,4-dihydro-4-oxo-3-quinolinecarboxylate  
 with boric acid in the presence of Ac2O and catalytic Zn gives the boron  
 chelate intermediate II [X = Cl]. Treatment of the latter with  
 (1S,4S)-5-methyl-2,5-diazabicyclo[2.2.1]heptane or its addition salts,  
 optionally in the presence of a base, gives the intermediate II [X =  
 7-[(1S,4S)-5-methyl-2,5-diazabicyclo[2.2.1]hept-2-yl]]. Finally,  
 hydrolysis of this chelate (e.g., with aqueous NaOH) gives I. In 2  
 examples,  
 a combination of the 2nd and 3rd steps gave I in 92-94% yield.  
 IT 190132-00-6P  
 RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic  
 preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (Intermediate: preparation of  
 diazabicycloheptyloxyquinolinecarboxylic acid

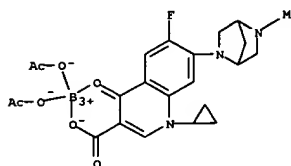
L12 ANSWER 58 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1997:334873 CAPLUS  
 DOCUMENT NUMBER: 126:310442  
 TITLE: Electrophotographic toner containing complex salts  
 INVENTOR(S): Nagatsuka, Takayuki; Tanaka, Katsuhiko  
 PATENT ASSIGNEE(S): Canon Kk, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.  
 CODEN: JKOXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09068824	A2	19970311	JP 1995-245102	19950831
JP 3323710	B2	20020909		
PRIORITY APPLN. INFO.:			JP 1995-245102	19950831

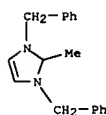
AB The toner contains fine particles of resin, inorg. oxide fine powders,  
 and  
 complex salts which satisfy the relations  $V_c \geq 0.3 \text{ nm}^2$  and  $V_a > V_c$   
 ( $V_a$  and  $V_c$  = volume of anion and cation, resp.) and have 5- or 6-membered  
 ring as the metal coordination site. The fine particles of resin may  
 contain magnetic powder which shows variation coefficient of the  
 particle size  
 $\leq 35\%$  and satisfies the relation:  $(-7/3) + r + 45 \leq MT$   
 $\leq (-7/3) + r + 75$  [MT = content of the magnetic powder; r =  
 weight average particle size of the toner ( $\mu\text{m}$ )] for uniform dispersion.  
 The  
 toner shows good environmental stability and provide images excellent in  
 uniformity at the highlighted area.  
 IT 189263-24-9  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)  
 (electrophotog. toner containing complex salts composed of  
 volume-defined  
 anion and cation to improve environmental stability)  
 RN 189263-24-9 CAPLUS  
 CN 1H-Indazolium, 2-methyl-1,3-bis(phenylmethyl)-, (T-4)-bis[4-(1,1,3,3-  
 tetramethylbutyl)-1,2-benzenediolato(2-)- $\kappa\text{O}, \kappa\text{O}'$ ]borate(1-)  
 (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 189263-22-7  
 CMF C28 H40 B O4  
 CCI CCS



L12 ANSWER 57 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 deriv. via boron chelates)  
 RN 190132-00-4 CAPLUS  
 CN Boron, bis(acetato- $\kappa\text{O}$ )[1-cyclopropyl-6-fluoro-1,4-dihydro-7-(5-  
 methyl-2,5-diazabicyclo[2.2.1]hept-2-yl)-4-(oxo- $\kappa\text{O}$ )-3-  
 quinolinecarboxylato- $\kappa\text{O3}$ ]-, [T-4-(1S)]- (9CI) (CA INDEX NAME)

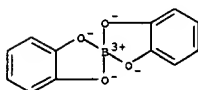


L12 ANSWER 58 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 CRN 101554-35-2  
 CMF C18 H19 N2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

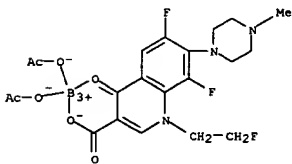
L12 ANSWER 59 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1996:381137 CAPLUS  
 DOCUMENT NUMBER: 125:128193  
 TITLE: Complexes of boron with catechol: the x-ray crystal structure of Meulenhoff's salt, 2[(pyH)[B(cat)2]·H2cat]·H2O  
 AUTHOR(S): Griffith, William P.; White, Andrew J. P.; Williams, David J.  
 CORPORATE SOURCE: Inorganic and Chemical Crystallographic Research Laboratories, Imperial Coll. of Sci., Technol. and Med., London, SW7 2AY, UK  
 SOURCE: Polyhedron (1996), 15(17), 2835-2839  
 CODEN: PLYHDE; ISSN: 0277-5387  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Meulenhoff's salt, 2[(pyH)[B(cat)2]·H2cat]·H2O, was prepared by the original literature method and its x-ray crystal structure determined  
 Crystals are monoclinic, space group P21/n, with a 24.12(2), b 7.090(8), c 25.04(2) Å, and β 96.52(7)°; Z = 4, dc = 1.33; R = 0.066, Rw = 0.055. The stoichiometry is confirmed as 1:1:3 pyridine:B:catechol, though only two of the catechol units are bound directly to the B center. The IR and Raman vibrational spectra of the solid and the 1H, 13C[1H] and 11B[1H] NMR spectra of the complex in solution are reported, and suggest that the solid state structure of the anion is maintained in solution  
 IT 179122-55-5  
 RL: PRP (Properties)  
 (crystal structure of)  
 RN 179122-55-5 CAPLUS  
 CN Borate(1-), bis[1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 1,2-benzenediol and pyridine, hydrate (2:2:2:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 22450-98-2  
 CMF C12 H8 B O4 . H  
 CCI CCS



● H<sup>+</sup>

CM 2  
 CRN 120-80-9  
 CMF C6 H6 O2

L12 ANSWER 60 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1996:269580 CAPLUS  
 DOCUMENT NUMBER: 125:10649  
 TITLE: Studies on synthesis of a fluoroquinolone antimicrobial agent fleroxacin  
 AUTHOR(S): Wang, Erhua; Jin, Rong  
 CORPORATE SOURCE: Medical and Chem. Inst., China Pharmaceutical Univ., Nanjing, 210009, Peop. Rep. China  
 SOURCE: Zhongguo Yaoke Daxue Xuebao (1995), 26(6), 321-3  
 CODEN: ZHYX9; ISSN: 1000-5048  
 PUBLISHER: Zhongguo Yaoke Daxue  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 AB An improved synthesis of antibacterial agent fleroxacin, starting from 2,3,4-trifluoronitrobenzene via reduction, condensation-cyclization, fluoroethylation, chelation, piperazination, and hydrolysis was described.  
 The reactions of all steps were carried out under moderate condition with the overall yield of 40%.  
 IT 176982-64-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis of fluoroquinolone antimicrobial agent fleroxacin from trifluoronitrobenzene)  
 RN 176982-64-2 CAPLUS  
 CN Boron, bis(acetato-O) [6,8-difluoro-1-(2-fluoroethyl)-1,4-dihydro-7-(4-methyl-1-piperazinyl)-4-oxo-3-quinolincarboxylato-O3,O4]-, (T-4)- (9CI) (CA INDEX NAME)



L12 ANSWER 59 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



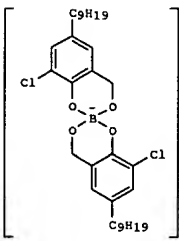
CM 3  
 CRN 110-86-1  
 CMF C5 H5 N



L12 ANSWER 61 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1996:163906 CAPLUS  
 DOCUMENT NUMBER: 124:202593  
 TITLE: Novel co-ordinated metal/boron compounds as biocides, their methods of synthesis, their use and their formulation  
 INVENTOR(S): Maynard, Nigel Paul  
 PATENT ASSIGNEE(S): N. Z.  
 SOURCE: PCT Int. Appl., 38 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9531425	A1	19951123	WO 1995-NZ38	19950508
W:	AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT			
RW:	KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9525393	A1	19951205	AU 1995-25393	19950508
ZA 9503931	A	19960117	ZA 1995-3931	19950515
			NZ 1994-260530	A 19940516
PRIORITY APPLN. INFO.:			WO 1995-NZ38	W 19950508

OTHER SOURCE(S): MARPAT 124:202593  
 GI

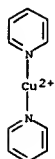


NH<sub>3</sub>  
 |  
 Cu<sup>2+</sup>  
 |  
 NH<sub>3</sub>

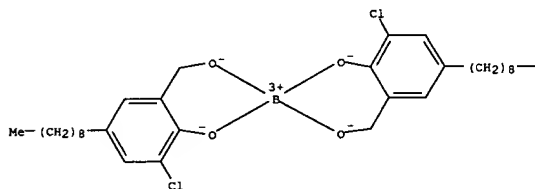
AB The invention includes the synthesis of multivalent metal complexes with B containing complex organic anions, e.g., I. The complexes include or may include

L12 ANSWER 61 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 ligands. Complexes capable of being so synthesized are also disclosed as  
 is their use as biocides which fix owing to low aq. soly. Intermediates  
 of the process or complexes of the process (after heating or when  
 provided  
 with ligands low on the series) are also useful to strip multivalent  
 metal  
 cations or ligand forming compds. from an aq. phase (usually by the  
 movement of the complex with the attached multivalent metal cations or  
 ligands into an org. solvent phase), thereby completing the synthesis.  
 IT 174459-03-1P  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except  
 adverse); BSU (Biological study, unclassified); SPN (Synthetic  
 preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation as biocides)  
 RN 174459-03-1 CAPLUS  
 CN Copper(2+), bis(pyridine)-, bis[(T-4)-bis[3-chloro-2-hydroxy-5-  
 nonylbenzenemethanolato(2-)-O,O']borate(1-)] (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 174459-00-8  
 CMF C32 H46 B Cl2 O4  
 CCI CCS

L12 ANSWER 61 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



PAGE 1-A



PAGE 1-B

— Me

CM 2  
 CRN 23236-29-5  
 CMF C10 H10 Cu N2  
 CCI CCS

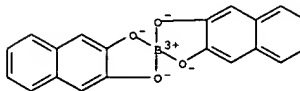
L12 ANSWER 62 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1996:67579 CAPLUS  
 DOCUMENT NUMBER: 124:215974  
 TITLE: Electrostatographic developer toner with good  
 charging  
 properties  
 INVENTOR(S): Tanaka, Katsuhiko; Nagatsuka, Takayuki; Ichikawa,  
 Yasuhiro; Takahashi, Toshihiko  
 PATENT ASSIGNEE(S): Canon Kk, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.  
 CODEN: JKKXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:  

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07295296	A2	19951110	JP 1994-110243	19940427
JP 3074589	B2	20000807		

 PRIORITY APPLN. INFO.: JP 1994-110243 19940427  
 OTHER SOURCE(S): MARPAT 124:215974  
 GI

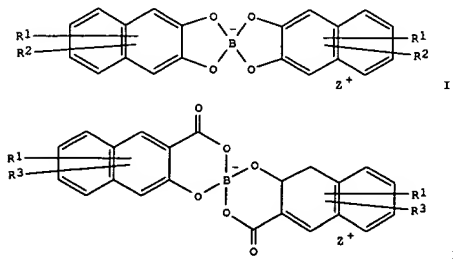
L12 ANSWER 62 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CM 1  
 CRN 47422-29-7  
 CMF C20 H12 B O4 . H  
 CCI CCS



• H+

CM 2  
 CRN 110-86-1  
 CMF C5 H5 N



AB The toner contains  $\geq 1$  I and/or II (R1-2 = H, halo, alkyl, alkoxy,  
 acyl, ester; R3 = halo, alkyl, alkoxy, acyl, ester; R1-3 may be  
 substituted with aryl group). The toner may contain an inorg. oxide with  
 electronegativity of metal ion 10-15. The toner showed good charging  
 properties and repeating durability.  
 IT 174188-61-5  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (electrostatog. developer toner containing boron compound  
 charge-controlling  
 agent)  
 RN 174188-61-5 CAPLUS  
 CN Borate(1-), bis[2,3-naphthalenediolato(2-)-O,O']-, (T-4)-, hydrogen,

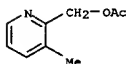
OTHER SOURCE(S): CASREACT 123:143645; MARPAT 123:143645  
 GI For diagram(s), see printed CA issue.  
 AB In the title-referenced process for the preparation of pyridine N-oxides  
 I and  
 pyridinemethanols II [R2, R3 = H, Me, OMe; R4 = CH2CF3, Et, iso-Pr,  
 (CH2)3OMe], the improvement is characterized by reaction, in a solvent,  
 of  
 the reactive intermediate salts III or IV [D = variable-valence element;  
 a, b = 0 or integer, with (a+b)>0] with a corresponding alc. derivative  
 D(OH)C-M+ [Y: M = Lewis acid, protonated organic base, Si derivative].  
 Elements  
 functioning as D include Pd, P, S, B, and Br. The method is applicable  
 to  
 preparation of intermediates for antiulcer agents, especially  
 lansoprazole. For  
 example, 0.4 mL PBr3 was heated with 5 mL CF3CH2OH at 70° until  
 formed HBr was eliminated (solution A). Meanwhile, 3 g 85% KOH was  
 added to  
 10 mL CF3CH2OH at 5°, with the temperature rising to 20-25° (solution  
 B). Upon dissoln. of KOH, solution A was added to solution B, followed  
 by 2.5 g  
 2,3-dimethyl-4-nitropyridine N-oxide. Refluxing of the mixture for 2 h  
 25  
 min gave complete reaction to a single product by TLC, namely  
 2,3-dimethyl-4-(2,2,2-trifluoroethoxy)pyridine N-oxide (VI). Adnli.  
 examples show preparation of VI using SCi2 or Br2 in place of PBr3.  
 Evidence  
 for the existence of the denitro-supercations in III and IV, and the  
 superanions in V, is described.  
 IT 166521-88-6P 166521-89-7P  
 RL: PNU (Preparation, unclassified); PREP (Preparation)  
 (reactive intermediate; improved preparation of alkoxypyridine  
 derivs. via  
 alkoxydenitration of nitropyridines with supersalts)  
 RN 166521-88-6 CAPLUS  
 CN Borate(1-), (nitrito-O)tris(2,2,2-trifluoroethanolato)-, (T-4)-, salt  
 with  
 2,3-dimethylpyridine 1-oxide (1:1) (9CI) (CA INDEX NAME)  
 CM 1

CM 2

CRN 166521-79-5

CMF C9 H11 N O2

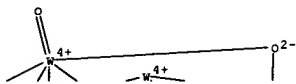
CCI RIS



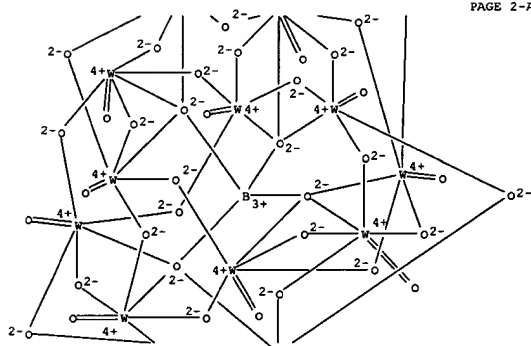
L12 ANSWER 64 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1995:206843 CAPLUS  
 DOCUMENT NUMBER: 122:281395  
 TITLE: Relationship of the molecular size and charge density  
 of polyoxometalates to their anti-gp120-CD4-binding  
 activity  
 AUTHOR(S): Judd, D. A.; Schinazi, R. F.; Hill, C. L.  
 CORPORATE SOURCE: Dep. Chem., Emory Univ., Atlanta, GA, 30322, USA  
 SOURCE: Antiviral Chemistry & Chemotherapy (1994), 5(6),  
 410-414  
 CODEN: ACCHEH; ISSN: 0956-3202  
 PUBLISHER: Blackwell  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The ability of several classes of polyoxometalates to inhibit the  
 interaction between HIV-1 gp120 and CD4 was assessed. No clear relation  
 was found between binding inhibition and the neg. charge d. on the anion  
 part of the polyoxometalate. However, a weak correlation was found  
 with mol. size. There was a mol. weight threshold of 3800 g mol<sup>-1</sup> above  
 which no significant increase in potency was gained; the binding  
 inhibition was nearly quant. above this mol. weight  
 IT 131541-70-3  
 RL: BAC (Biological activity or effector, except adverse); BSU  
 (Biological  
 study, unclassified); PRP (Properties); THU (Therapeutic uses); B10L  
 (Biological study); USES (Uses)  
 (relationship of mol. size and charge d. of polyoxometalates to their  
 anti-gp120-CD4-binding activity)  
 RN 131541-70-3 CAPLUS  
 CN L-Histidine, tetracosaj- $\alpha$ -oxododecaoxo[ $\mu$ 12-tetrahydroxyborato(5-)-  
 O:O:O:O':O':O':O':O':O':O':O':O':O':O':O':O']dodecatungstate(5-) (9CI) (CA  
 INDEX NAME)  
 CM 1  
 CRN 12297-12-0  
 CMF B 040 W12 . 5 H  
 CCI CCS



PAGE 1-A



PAGE 2-A



L12 ANSWER 65 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN

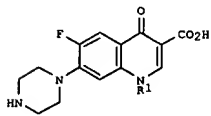
ACCESSION NUMBER: 1995:182998 CAPLUS  
 DOCUMENT NUMBER: 122:81399  
 TITLE: Process for preparing 1-substituted-6-fluoro-4-oxo-7-(1-piperazinyl)-1,4-dihydroquinoline-3-carboxylic acid, a novel intermediate useful in said process,

and

INVENTOR(S): a process for preparing said intermediate  
 Zupancic, Nataša; Barbo, Martin; Sket, Boris; Zupet, Pavel  
 PATENT ASSIGNEE(S): Slovenia  
 SOURCE: Can. Pat. Appl., 14 pp.  
 CODEN: CPXXEB  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

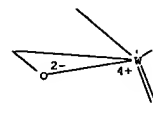
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2111181	AA	19940612	CA 1993-2111181	19931210
HU 75319	A2	19970528	HU 1993-2940	19931018
EL 173784	B1	19980430	PL 1993-301045	19931112
CZ 284715	B6	19980217	CZ 1993-2643	19931206
LT 3084	B	19941125	LT 1993-1558	19931207
AT 9302497	A	19960315	AT 1993-2497	19931210
AT 401648	B	19961025		
LV 10863	B	19960820	LV 1993-1317	19931210
RU 2127270	C1	19990310	RU 1993-54527	19931210
			SI 1992-377	A 19921211

PRIORITY APPLN. INFO.:  
 OTHER SOURCE(S): CASREACT 122:81399; MARPAT 122:81399  
 GI



AB A process for preparing 1-substituted-6-fluoro-4-oxo-7-(1-piperazinyl)-1,4-dihydroquinoline-3-carboxylic acids I (R2 = alkyl, cycloalkyl or 2,4-difluorophenyl) was disclosed; I are prepared by hydrolysis of novel boron diacetate precursors. II are useful for the treatment of inflammatory diseases. It is obtained by a nucleophilic substitution of the halo atom in 7-position in the compound of the formula III.  
 IT 158964-91-1P 158964-92-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of (fluoro)oxo(piperazinyl)quinolinecarboxylates from boron diacetate intermediates)  
 RN 158964-91-1 CAPLUS

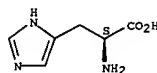
PAGE 3-A

● 5 H<sup>+</sup>

CM 2

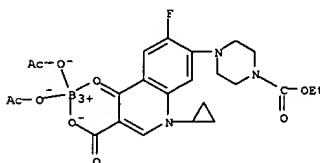
CRN 71-00-1  
 CHF C6 H9 N3 O2

Absolute stereochemistry. Rotation (-).

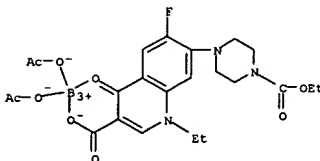


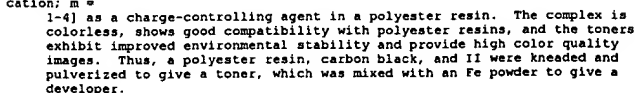
L12 ANSWER 65 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CN Boron,  
 bis(acetato-O) [1-cyclopropyl-7-[4-(ethoxycarbonyl)-1-piperazinyl]-6-fluoro-1,4-dihydro-4-oxo-3-quinolinecarboxylato-O3,O4]-, (T-4)- (9CI)  
 (CA INDEX NAME)



RN 158964-92-2 CAPLUS  
 CN Boron, bis(acetato-O) [7-[4-(ethoxycarbonyl)-1-piperazinyl]-1-ethyl-6-fluoro-1,4-dihydro-4-oxo-3-quinolinecarboxylato-O3,O4]-, (T-4)- (9CI)  
 (CA INDEX NAME)





L12 ANSWER 68 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

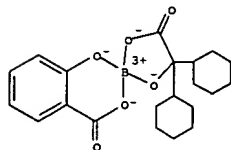
IT 154507-78-5 154507-80-9  
RL: USES (Uses)

(charge-controlling agent, electrophotog. toner containing)

RN 154507-78-5 CAPLUS  
CN Borate(1-), [ $\alpha$ -cyclohexyl- $\alpha$ -hydroxycyclohexanecarboxylate(2-)] [2-hydroxybenzoate(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 1-methyl-1H-pyrrole (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 154507-77-4  
CMF C21 H26 B O6 . H  
CCI CCS



● H<sup>+</sup>

CM 2

CRN 96-54-8  
CMF C5 H7 N

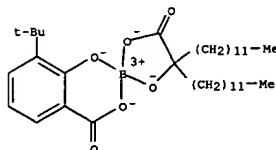


RN 154507-80-9 CAPLUS  
CN Piperidinium, 1,1-dimethyl-, (T-4)-[3-(1,1-dimethylethyl)-2-hydroxybenzoate(2-)-O1,O2][2-dodecyl-2-hydroxytetradecanoate(2-)-O1,O2]borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 154507-79-6  
CMF C37 H62 B O6  
CCI CCS

L12 ANSWER 68 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



CM 2

CRN 15302-91-7  
CMF C7 H16 N

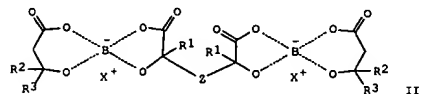
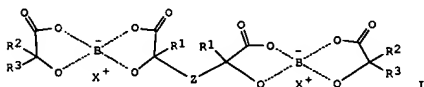


L12 ANSWER 69 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:178138 CAPLUS  
DOCUMENT NUMBER: 120:178138  
TITLE: Electrophotographic toners using boron complex as charge-controlling agent  
INVENTOR(S): Hasegawa, Junko; Takeda, Teruichi; Ebisawa, Makoto  
PATENT ASSIGNEE(S): Japan Carlit Co Ltd, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
CODEN: JKKXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05165256	A2	19930702	JP 1991-351823	19911216
PRIORITY APPLN. INFO.:			JP 1991-351823	19911216

GI



AB The title toners contain, as a charge-controlling agent, a B complex I or II (R1-3 = H, alkyl, alkenyl, (substituted) aromatic ring or condensed ring;

Z = (substituted) aromatic ring or condensed ring; X<sup>+</sup> = cation]. The charge-controlling agent is colorless and the toners show sharp and uniform triboelec. charge distribution and good environmental stability and provide high-quality color images. Thus, a polystyrene resin, carbon black, and I (R1 = R2 = H; R3 = Ph; Z = p-phenylene; X<sup>+</sup> = Li<sup>+</sup>) were kneaded and pulverized to give a toner, which was mixed with an Fe powder to give a developer.

IT 152576-36-8 152576-39-1

RL: USES (Uses)

(charge-controlling agent, electrophotog. photoreceptor containing)

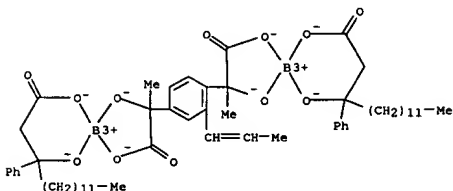
RN 152576-36-8 CAPLUS  
CN Piperidinium, 1,1-dimethyl-, [ $\mu$ -[ $\alpha$ , $\alpha'$ -dihydroxy- $\alpha$ , $\alpha'$ -dimethyl-3-(1-propenyl)-1,4-benzenediacetato(4-)]bis[2-ethyl-2-hydroxy-7-nonenato(2-)-O1,O2]di-, dihydrogen, compd. with 1-methyl-1H-pyrrole (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 152576-35-7

L12 ANSWER 69 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CMF C57 H78 B2 O12  
CCI CCS



CM 2

CRN 15302-91-7  
CMF C7 H16 N

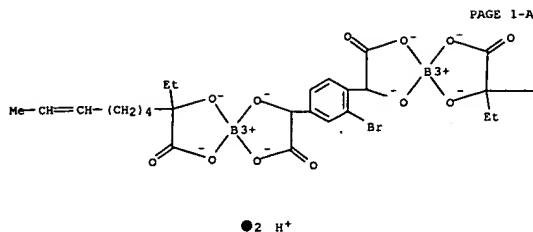


RN 152576-39-1 CAPLUS

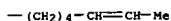
CN Borate(2-), [ $\mu$ -[2-bromo- $\alpha$ , $\alpha'$ -dihydroxy-1,4-benzenediacetato(4-)]bis[2-ethyl-2-hydroxy-7-nonenato(2-)-O1,O2]di-, dihydrogen, compd. with 1-methyl-1H-pyrrole (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 152576-38-0  
CMF C32 H41 B2 Br O12 . 2 H  
CCI CCS



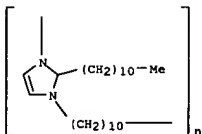
PAGE 1-B



CM 2

CRN 96-54-8

CMF C5 H7 N



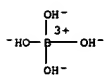
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15390-83-7

CMF B H4 O4

CCI CCS

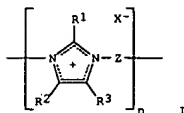


ACCESSION NUMBER: 1994:90789 CAPLUS  
 DOCUMENT NUMBER: 120:90789  
 TITLE: Charge-controlling agents and electrophotographic toners using them  
 INVENTOR(S): Nakanishi, Hideo; Ikeda, Hiroyuki  
 PATENT ASSIGNEE(S): Sanyo Chemical Ind Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKOKAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05165258	A2	19930702	JP 1991-352241	19911213
JP 08012486	B4	19960207		

PRIORITY APPLN. INFO.: JP 1991-352241 19911213

GI



AB The charge-controlling agents are polymer quaternary salts I (R1 = H, Cl-17 hydrocarbon; R2, R3 = H, Cl-8 hydrocarbon, R2 and R3 may form an aromatic ring; Z = Cl-12 alkylene group which may have ether bond; X- = anion; n = 2-100), and the toners comprise a binder resin, a colorant,

and the agent. The toners show good thermal resistance and stable chargeability under varied environmental conditions and prevent generation of bad smell on heating. Thus, Himer GRX2500 (styrene-acrylic copolymer),

Regal 330R (carbon black), I [R1-3 = H; Z = (CH2)6; X- = 1-naphthalenesulfonate ion], and Viscol 550P (polypropylene wax) were kneaded and pulverized to give a toner, which was mixed with a ferrite carrier to give a developer.

IT 152584-99-1

RL: USES (Uses)

(charge-controlling agent, electrophotog. developer toner containing)

RN 152584-99-1 CAPLUS

CN Poly[(2-undecyl-1H-imidazolium-1,4-diyl)-1,10-decanediyl tetrahydroxyborate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 152584-98-0

CMF (C24 H45 N2)n

CCI PMS

ACCESSION NUMBER: 1993:661384 CAPLUS  
 DOCUMENT NUMBER: 119:261384  
 TITLE: Clathrates with three-dimensional host structures of hydrogen-bonded pentaborate [B5O6(OH)4]- ions: pentaborates with the cations NMe4+, NEt4+, NPhMe3+ and pipH+ (pipH+ = piperidinium)  
 AUTHOR(S): Wiebecke, Michael; Freyhardt, Clemens C.; Felsche, Juergen; Engelhardt, Guenter  
 CORPORATE SOURCE: Fak. Chem., Univ. Konstanz, Konstanz, D-78434, Germany  
 SOURCE: Zeitschrift fuer Naturforschung, B: Chemical Sciences

(1993), 48(7), 978-85

CODEN: ZNBSEN; ISSN: 0932-0776

DOCUMENT TYPE: Journal

LANGUAGE: English

AB X-ray structure analyses of crystalline [NMe4][B5O6(OH)4].nH2O (n = 0.25-0.50) (1), [NEt4][B5O6(OH)4] (2), [NPhMe3][B5O6(OH)4] (3), and [pipH][B5O6(OH)4] (4) reveal that these materials are novel clathrates with closely related 3-dimensional host structures built up of H-bonded oligomeric [B5O6(OH)4]-. The organic cations and H2O mols. (in 1) occupy as

guest species large straight channel-like voids of nearly rectangular cross section. 1 Crystallizes as monoclin., space group P21/c, Z = 4; 2, 3 and 4, which possess the same host-structure topol., crystallize as triclinic, space group P.hivin.1, Z = 2. 11B MAS NMR spectra allow the detection of small angular distortions in the [B5O6(OH)4]- caused by the specific H bonding in the host frameworks. Upon heating the compds. on a thermobalance in a dynamic inert gas atmospheric dehydration occurs at temps. of

563 K (1), 543 K (2), 558 K (3) and 523 K (4) before degradation of the organic cations starts at temps. of 633 K (1), 623 K (2), 623 K (3) and 613 K (4).

IT 12548-84-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and crystal structure and boron-11 NMR spectrum and thermal dehydration and decomposition of)

RN 12548-84-4 CAPLUS

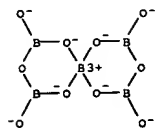
CN Borate(5-), bis[μ-oxotetraoxodiborate(4-)]-, (T-4)-, pentahydrogen, compd. with piperidine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 92258-67-8

CMF B5 O10 . 5 H

CCI CCS

● 5 H<sup>+</sup>

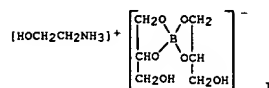
CM 2

CRN 110-89-4  
CMF C5 H11 N

L12 ANSWER 72 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1993:429575 CAPLUS  
 DOCUMENT NUMBER: 119:29575  
 TITLE: Antistatic thermoplastic resin laminates  
 INVENTOR(S): Kuze, Katsuro; Tahoda, Tadashi  
 PATENT ASSIGNEE(S): Toyobo Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

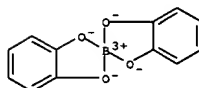
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04311735	A2	19921104	JP 1991-77792	19910410

PRIORITY APPLN. INFO.:  
 OTHER SOURCE(S): MARPAT 119:29575  
 GI



AB The title laminates comprise antistatic agent layers of charge-transfer complexes comprising nonionic amines and semipolar borates (e.g., I) on  $\geq 1$  side of a thermoplastic resin film (e.g., PET).  
 IT 147390-96-3 147390-98-5  
 RL: USES (Uses)  
 (antistatic agents, for thermoplastic films)  
 RN 147390-96-3 CAPLUS  
 CN Borate(1-), bis[1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 4-methylmorpholine (1:1) (9CI) (CA INDEX NAME)

CM 1

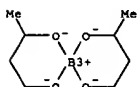
CRN 22450-98-2  
CMF C12 H8 B O4 . H  
CCI CCS● H<sup>+</sup>

CM 2

CRN 109-02-4  
CMF C5 H11 N O

RN 147390-98-5 CAPLUS  
 CN Borate(1-), bis[1,3-butanediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 147390-97-4  
CMF C8 H16 B O4 . H  
CCI CCS● H<sup>+</sup>

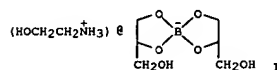
CM 2

CRN 110-86-1  
CMF C5 H5 N

L12 ANSWER 73 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1993:214286 CAPLUS  
 DOCUMENT NUMBER: 118:214286  
 TITLE: Antistatic agents for plastics, fibers, or paper  
 INVENTOR(S): Kuze, Katsuro; Tahoda, Tadashi; Hamanaka, Hiroyoshi  
 PATENT ASSIGNEE(S): Toyobo Co., Ltd., Japan; Boron International K.K.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04288390	A2	19921013	JP 1991-15536	19910206
JP 2968061	B2	19991025		

PRIORITY APPLN. INFO.:  
 OTHER SOURCE(S): MARPAT 119:29575  
 GI



AB The title agents comprise the reaction products of nonionic compds. containing one basic N and B compds. with a specified structure. Thus, a polyester film was coated with an aqueous solution containing I to give a 0.5- $\mu$ m coat with surface resistivity 3.8 + 1010  $\Omega$ , vs. >1015 for the noncoated film.

IT 147390-96-3 147390-98-5

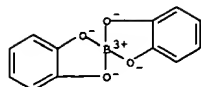
RL: USES (Uses)  
(antistatic agents, for plastic films)

RN 147390-96-3 CAPLUS

CN Borate(1-), bis[1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 4-methylmorpholine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 22450-98-2  
CMF C12 H8 B O4 . H  
CCI CCS

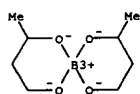
● H<sup>+</sup>

CM 2

CRN 109-02-4  
CMF C5 H11 N O

RN 147390-98-5 CAPLUS  
CN Borate(1-), bis[1,3-butanediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 147390-97-4  
CMF C8 H16 B O4 . H  
CCI CCS● H<sup>+</sup>

CM 2

CRN 110-86-1  
CMF C5 H5 N

L12 ANSWER 74 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1992:652822 CAPLUS  
DOCUMENT NUMBER: 117:252822  
TITLE: Borate-containing polyamide composition for membrane filters  
INVENTOR(S): Grachev, V. I.; Artamonov, V. A.; Chekhovich, L. P.  
PATENT ASSIGNEE(S): Institute of Physical-Organic Chemistry, Academy of Sciences, Belorussian S.S.R., USSR  
SOURCE: U.S.S.R. From: Otkrytiya, Izobret. 1991, (47), 20.  
DOCUMENT TYPE: Patent  
LANGUAGE: Russian  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 1699490	A1	19911223	SU 1989-4720902	19890720
PRIORITY APPLN. INFO.:			SU 1989-4720902	19890720

AB The title composition, conferring increased elasticity, radiation and heat

resistant on membrane filters, comprises adipic acid-ε-caprolactam-hexamethylenediamine copolymer, glycerol, 2-aminopyridiniumdi(o-oxyphenylene) borate, and HCO<sub>2</sub>H.

IT 144672-73-1

RL: USES (Uses)

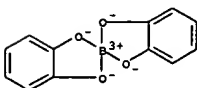
(polyamide composition containing, for membrane filters, for increased heat and

radiation resistance)

RN 144672-73-1 CAPLUS

CN Borate(1-), bis[1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 22450-98-2  
CMF C12 H8 B O4 . H  
CCI CCS● H<sup>+</sup>

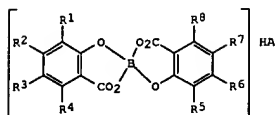
CM 2

CRN 504-29-0  
CMF C5 H6 N2

L12 ANSWER 75 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1992:642782 CAPLUS  
 DOCUMENT NUMBER: 117:242782  
 TITLE: Thermal recording materials using disalicylborate double salt color developer  
 INVENTOR(S): Tanaka, Ginnoy; Totokori, Kotaro; Shiraiishi, Tomohisa; Kawai, Hajime  
 PATENT ASSIGNEE(S): Osaki Kogyo Co., Ltd., Japan; Yamada Kagaku Kogyo K. K.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXKAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04153082	A2	19920526	JP 1990-281310	19901018
PRIORITY APPLN. INFO.:			JP 1990-281310	19901018

GI



AB The title materials contain a leuco dye and, as a color developer, a double salt I m. 70-250° (R1,R4,R5,R8 = H, alkyl, aryl; R2,R3,R6,R7 = H, OH, alkyl, aryl; A = N-containing basic organic compound). A thermal recording paper using 2-anilino-3-methyl-6-ethylisopentylaminofluoran and I (R1-R8 = H, A = Et2N) gave high-d. and low-fog images with good storage stability.

IT 69030-98-4

RL: USES (Uses)

(color-developer, thermal recording material using)

RN 69030-98-4 CAPLUS

CN Borate(1-), bis[2-(hydroxy-kO)benzoate(2--kO)-, (T-4)-, hydrogen, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

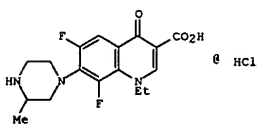
CH 1

CRN 22450-97-1

CMF C14 H8 B O6 . H

CCI CCS

L12 ANSWER 76 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1992:235582 CAPLUS  
 DOCUMENT NUMBER: 116:235582  
 TITLE: Improved preparation of lomefloxacin hydrochloride  
 AUTHOR(S): Wang, Erhua; Yao, Hong; Peng, Sixun  
 CORPORATE SOURCE: China Pharm. Univ., Nanjing, 210009, Peop. Rep. China  
 SOURCE: Zhongguo Yiyao Gongye Zazhi (1991), 22(10), 437-9  
 CODEN: ZYGZEA; ISSN: 1001-8255  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 GI



AB A facile preparation of lomefloxacin-HCl (I) starting from 2,3,4-trifluoronitrobenzene, via reduction, condensation-cyclization, ethylation, chelation, piperazination, hydrolysis, etc., was described. The reactions of all steps were carried out in very moderate conditions to afford overall yield of 40%.

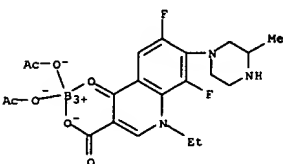
IT 141301-51-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation); RACT (Reactant or reagent)

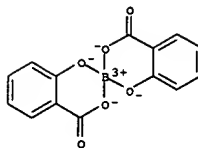
(preparation and reaction with triethylamine)

RN 141301-51-1 CAPLUS

CN Boron, bis(acetato-O) [1-ethyl-6,8-difluoro-1,4-dihydro-7-(3-methyl-1-piperazinyl)-4-oxo-3-quinolinecarboxylato-O3,O4]-, (T-4)- (9CI) (CA INDEX NAME)



L12 ANSWER 75 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● H+

CH 2

CRN 110-86-1

CMF C5 H5 N

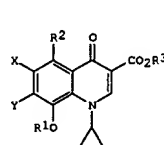
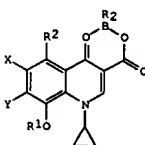


L12 ANSWER 77 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1992:152003 CAPLUS  
 DOCUMENT NUMBER: 116:152003  
 TITLE: (6,7-Substituted-8-alkoxy-1-cyclopropyl-1,4-dihydro-4-oxo-3-quinolinecarboxylic acid O3,O4)bis(acyloxy-O)borates and the salts thereof, and methods for their manufacture  
 INVENTOR(S): Takagi, Naomi; Fubasami, Hironobu; Matsukubo, Hiroshi  
 PATENT ASSIGNEE(S): Kyorin Pharmaceutical Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 13 pp.  
 CODEN: EPXKDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 464823	A1	19920108	EP 1991-111139	19910704
EP 464823	B1	19990922		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL, SE	A2	19920304	JP 1990-178765	19900706
JP 07078065	B4	19950823		
US 5157117	A	19921020	US 1991-724164	19910701
ES 2137154	T3	19991216	ES 1991-111139	19910704
CA 2046361	AA	19920107	CA 1991-2046361	19910705
CA 2046361	C	19990720		
HU 58747	A2	19920330	HU 1991-2279	19910705
HU 215429	B	19990428		
AU 9180263	A1	19930128	AU 1991-80263	19910705
AU 646055	B2	19940203		
CN 1059527	A	19920318	CN 1991-104666	19910706
CN 1031795	B	19960515		
FI 103794	B1	19990930	FI 1992-12	19920102
AT 397656	B	19940627	AT 1992-9	19920107
AT 9200009	A	19931015		
PRIORITY APPLN. INFO.:			JP 1990-178765	A 19900706

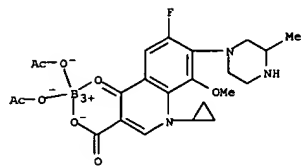
OTHER SOURCE(S): CASREACT 116:152003; MARPAT 116:152003

GI

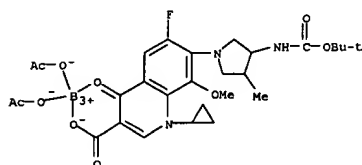


AB A process for the preparation of (6,7-substituted 8-alkoxy-1-cyclopropyl-1,4-

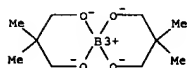
L12 ANSWER 77 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 dihydro-4-oxo-3-quinolinecarboxylic acid bis(acyloxy) borate of general formula I comprises the treatment of carboxyl compd. II with triacyloxyborate deriv. BR3. E.g., II (X = Y = F, R1 = Me, R2 = H, R3 = Et) (200 g) was added to a mixt. of boric acid (57.2 g) and zinc chloride (1.24 g) in acetic anhydride (300 mL) and acetic acid (400 mL) at a temp. of 50-60° to give 249 g of I (X = Y = F, R1 = Me, R2 = H, R = acetato).  
 IT 139693-53-1P 139693-54-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and thermal reaction of)  
 RN 139693-53-1 CAPLUS  
 CN Boron, bis(acetato-O) [1-cyclopropyl-6-fluoro-1,4-dihydro-8-methoxy-7-(3-methyl-1-piperazinyl)-4-oxo-3-quinolinecarboxylato-O3,O4]-, (T-4)- (9CI) (CA INDEX NAME)



RN 139693-54-2 CAPLUS  
 CN Boron, bis(acetato-O) [1-cyclopropyl-7-[[(1,1-dimethylethoxy)carbonyl]amino]-4-methyl-1-pyrrolidinyl]-6-fluoro-1,4-dihydro-8-methoxy-4-oxo-3-quinolinecarboxylato-O3,O4]-, (T-4)-(cis)- (9CI) (CA INDEX NAME)



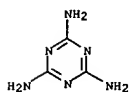
L12 ANSWER 78 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● H<sup>+</sup>

CM 2

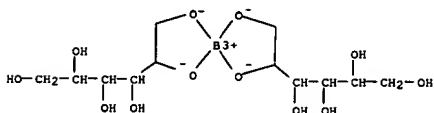
CRN 108-78-1  
 CMF C3 H6 N6



RN 139332-90-4 CAPLUS  
 CN Borate(1-), bis[D-mannitolato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 1,3,5-triazine-2,4,6-triamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 138662-95-8  
 CMF C12 H24 B O12 . H  
 CCI CCS



● H<sup>+</sup>

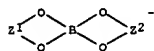
CM 2

CRN 108-78-1  
 CMF C3 H6 N6

L12 ANSWER 78 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1992:130450 CAPLUS  
 DOCUMENT NUMBER: 116:130450  
 TITLE: Spiroborate esters as fireproofing agents for plastics  
 INVENTOR(S): Horacek, Heinrich  
 PATENT ASSIGNEE(S): Chemie Linz (Deutschland) G.m.b.H., Germany  
 SOURCE: Ger. Offen., 6 pp.  
 CODEN: GWXCBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4015490	A1	19911121	DE 1990-4015490	19900515
PRIORITY APPLN. INFO.:			DE 1990-4015490	19900515

OTHER SOURCE(S): MARPAT 116:130450  
 GI



AB Amine salts of the spiroborates I [Z1, Z2 = diol residues or (jointly) a pentaerythritol residue] are halogen-free fireproofing agents for plastics. Thus, refluxing 0.24 mol H3BO3, 0.48 mol neopentyl glycol, and 360 mL EtOH for 2 h, adding 0.24 mol guanidine carbonate, and refluxing for 2 h gave neopentyl glycol spiroborate (2:1) guanidinium salt (1:1) (II). In a flame test (British Standard 5852, Crib 5), a polyurethane foam (bulk d. 0.021) containing 10% II and 10% melamine showed a weight loss of .apprx.21; vs. 15% without II.

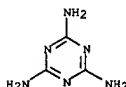
IT 139332-89-1P, Neopentylglycol spiroborate (2:1) melamine salt (1:1) 139332-90-4P, Manitol spiroborate (2:1) melamine salt (1:1) 139332-91-5P, Pentaerythritol spiroborate (1:1) melamine salt (1:1) 139332-92-6P, Pentaerythritol spiroborate (1:1) piperazine salt (1:1)  
 RL: PREP (Preparation)  
 (preparation of, as fireproofing agents for plastics)

RN 139332-89-1 CAPLUS  
 CN Borate(1-), bis[2,2-dimethyl-1,3-propanediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 1,3,5-triazine-2,4,6-triamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 85283-52-9  
 CMF C10 H20 B O4 . H  
 CCI CCS

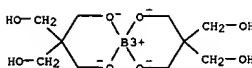
L12 ANSWER 78 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 139332-91-5 CAPLUS  
 CN Borate(1-), bis[2-bis(hydroxymethyl)-1,3-propanediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 1,3,5-triazine-2,4,6-triamine (1:1) (9CI) (CA INDEX NAME)

CM 1

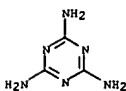
CRN 138582-95-3  
 CMF C10 H20 B O8 . H  
 CCI CCS



● H<sup>+</sup>

CM 2

CRN 108-78-1  
 CMF C3 H6 N6

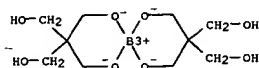


RN 139332-92-6 CAPLUS  
 CN Borate(1-), bis[2-bis(hydroxymethyl)-1,3-propanediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with piperazine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 138582-95-3  
 CMF C10 H20 B O8 . H  
 CCI CCS



● H<sup>+</sup>

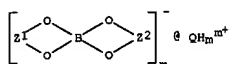
CM 2  
CRN 110-85-0  
CMF C4 H10 N2



L12 ANSWER 79 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1992:85008 CAPLUS  
DOCUMENT NUMBER: 116:85008  
TITLE: Spirocyclic borate esters as flame retardants for plastics  
INVENTOR(S): Horacek, Heinrich  
PATENT ASSIGNEE(S): Chemie Linz G.m.b.H., Austria  
SOURCE: Eur. Pat. Appl., 9 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 453821	A2	19911030	EP 1991-105131	19910330
EP 453821	A3	19920916		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 9000945	A	19910915	AT 1990-945	19900424
AT 394370	B	19920325		
US 5147914	A	19920915	US 1991-678939	19910403
PL 168003	B1	19951230	PL 1991-289989	19910422
RO 110502	B1	19960130	RO 1991-147404	19910422
HU 57780	A2	19911230	HU 1991-1357	19910423
RU 2039764	C1	19950720	RU 1991-4895157	19910423
PRIORITY APPLN. INFO.:			AT 1990-945	A 19900424

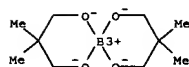
OTHER SOURCE(S): MARPAT 116:85008  
GI



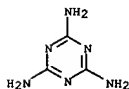
AB The spiroborates I [Q = N base; Z1, Z2 = residues of alcs. bearing 2-6 OH groups or together are C(CH2)4; m = 1-3] are halogen-free fireproofing agents for plastics. Refluxing 0.24 mol H3BO3, 0.48 g neopentyl glycol, and 360 mL EtOH for 2 h, cooling to 65°, slowly adding 0.12 mol guanidine carbonate, and refluxing for 2 h gave a spiroborate guanidinium salt (II). A polyurethane foam (1 kg) containing 10% II and 10% melamine, subjected to a burning test (BS 5852 Crib 5), lost 20 g, vs. 50 with 20 g melamine and no II.

IT 138582-97-5P 138582-98-6P 138582-99-7P  
138662-87-0P  
RL: PREP (Preparation)  
(manufacture of, as fireproofing agents for plastics)  
RN 138582-97-5 CAPLUS  
CN Borate(1-), bis[2,2-bis(hydroxymethyl)-1,3-propanediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1  
CRN 85283-52-9

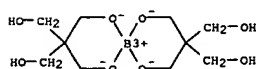
● H<sup>+</sup>

CM 2  
CRN 108-78-1  
CMF C3 H6 N6

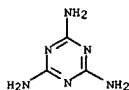


RN 138582-98-6 CAPLUS  
CN Borate(1-), bis[2,2-bis(hydroxymethyl)-1,3-propanediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1  
CRN 138582-95-3  
CMF C10 H20 B O8 . H  
CCI CCS

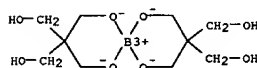
● H<sup>+</sup>

CM 2  
CRN 108-78-1  
CMF C3 H6 N6



RN 138582-99-7 CAPLUS  
CN Borate(1-), bis[2,2-bis(hydroxymethyl)-1,3-propanediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with piperazine (9CI) (CA INDEX NAME)

CM 1  
CRN 138582-95-3  
CMF C10 H20 B O8 . H  
CCI CCS

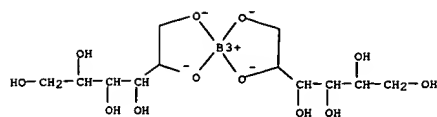
● H<sup>+</sup>

CM 2  
CRN 110-85-0  
CMF C4 H10 N2

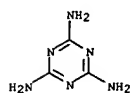


RN 138662-87-0 CAPLUS  
CN Borate(1-), bis[D-mannitolato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

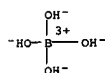
CM 1  
CRN 138662-85-8  
CMF C12 H24 B O12 . H  
CCI CCS

● H<sup>+</sup>

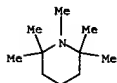
CM 2  
 CRN 108-78-1  
 CMF C3 H6 N6



L12 ANSWER 80 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1992:5952 CAPLUS  
 DOCUMENT NUMBER: 116:5952  
 TITLE: NMR study of the effect of nitrogen-borane coordination on the conformational equilibrium of six membered ring heterocycles  
 AUTHOR(S): Flores-Parra, Angelina; Farfan, Norberto; Hernandez-Bautista, Alberto I.; Fernandez-Sanchez, Lilia; Contreras, Rosalinda  
 CORPORATE SOURCE: Cent. Invest. Estud. Avanzados, Inst. Politec. Nac., Mexico City, 07000, Mex.  
 SOURCE: Tetrahedron (1991), 47(34), 6903-14  
 CODEN: TETRA; ISSN: 0040-4020  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The syntheses, conformational and spectroscopic studies of N-borane adducts of 14 nitrogen-containing six-membered ring heterocycles are reported. It was found that borane can act as a conformational and configurational locking agent. In addition, it can be very helpful for the assignment of the chemical shifts of other atoms or groups in the mol. as well as to ascertain the configuration at substituted carbons.  
 IT 137546-85-1P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and NMR of, as analog of borane coordination compound)  
 RN 137546-85-1 CAPLUS  
 CN Borate(1-), tetrahydroxy-, hydrogen, compd. with 1,2,2,6,6-pentamethylpiperidine (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 137546-84-0  
 CMF B H4 O4 . H  
 CCI CCS

● H<sup>+</sup>

CM 2  
 CRN 79-55-0  
 CMF C10 H21 N



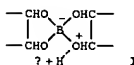
L12 ANSWER 81 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1991:472980 CAPLUS  
 DOCUMENT NUMBER: 115:72980  
 TITLE: Surface modification of inorganic fireproofing agents  
 INVENTOR(S): Hamanaka, Hiroyoshi  
 PATENT ASSIGNEE(S): Boron International K. K., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
 CODEN: JXXXXF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02294389	A2	19901205	JP 1989-113656	19890508

PRIORITY APPLN. INFO.:

JP 1989-113656 19890508

GI



AB Fireproofing agents for polymers with good compatibility are prepared by forming on hydrated metal compds. hybrid films of oriented, water-insol. hydrocarbyl compds. and semipolar B compds. containing I groups and/or basic N

compound complexes. Heating 1:1 di(glycerol)borate and ricinoleic acid dimer at 230-240° for 6 h, cooling to 70°, adding MEK and ethoxylated dihexadecylamine, and heating at 70-75° for 1 and at 120-130°/150 mm for 2 h gave a brown, viscous complex. Mixing 40 g 25% tricetylaluminum solution and 20 g 50% solution of this complex with

1 kg Al(OH)3 particles (1 μm) and stripping solvents gave modified Al(OH)3, which was kneaded 90:40 with polyethylene to give a 1-mm sheet with good acid and flex resistance.

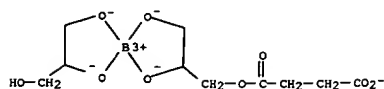
IT 134620-04-5  
 RL: USES (Uses)  
 (surface modification by, of inorg. fireproofing agents)

RN 134620-04-5 CAPLUS

CN Borate(2-), [mono(2,3-dihydroxypropyl) butanedioato(3-)] [1,2,3-propanetriolato(2-)-O1,O2]-, (T-4)-, dihydrogen, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 106530-70-5  
 CMF C10 H15 B O9 . 2 H  
 CCI CCS

● 2 H<sup>+</sup>

CM 2  
CRN 110-86-1  
CMF C5 H5 N

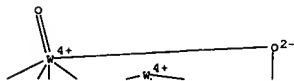


L12 ANSWER 82 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1991:115064 CAPLUS  
DOCUMENT NUMBER: 114:115064  
TITLE: Preparation and use of polyoxometallates for treatment of retrovirus infections  
INVENTOR(S): Hill, Craig L.; Schinazi, Raymond F.  
PATENT ASSIGNEE(S): Johnson Matthey PLC, UK  
SOURCE: Eur. Pat. Appl., 15 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

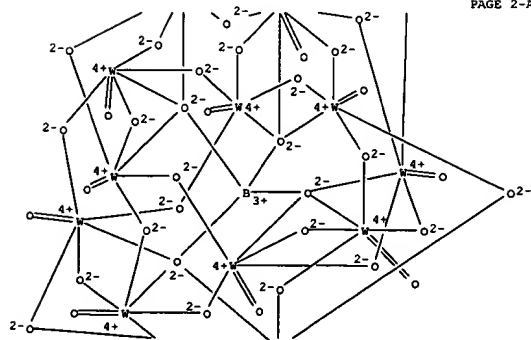
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 360619	A2	19900328	EP 1989-309678	19890922
EP 360619	A3	19910807		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
WO 9003176	A1	19900405	WO 1989-US4028	19890922
W: AU, DK, FI, HU, JP, KR, NO				
AU 8943168	A1	19900418	AU 1989-43168	19890922
ZA 8907260	A	19900725	ZA 1989-7260	19890922
US 6911470	B1	20050628	US 1993-140885	19931025
PRIORITY APPLN. INFO.:				US 1988-247641 A 19880922
				WO 1989-US4028 A 19890922
				US 1990-474389 B1 19900205
				US 1993-24837 B1 19930301

OTHER SOURCE(S): MARPAT 114:115064  
AB The title compds. comprise e.g. (X<sup>+</sup>)<sub>n</sub>(H<sup>+</sup>)<sub>4-n</sub>(SiW<sub>12</sub>O<sub>40</sub>)<sub>4-</sub> (n = 0-4; X = K, Na, NH<sub>4</sub>, histidinium, lysinium, argininium), (X<sup>+</sup>)<sub>n</sub>(H<sup>+</sup>)<sub>5-m</sub>(BW<sub>12</sub>O<sub>40</sub>)<sub>5-</sub> (m = 0-5; X as above), (X<sup>+</sup>)<sub>n</sub>(H<sup>+</sup>)<sub>4-n</sub>(W<sub>10</sub>O<sub>32</sub>)<sub>4-</sub> (n = 0-4; X as above), (X<sup>+</sup>)<sub>p</sub>(H<sup>+</sup>)<sub>3-p</sub>(PW<sub>12</sub>O<sub>40</sub>)<sub>3-</sub> (p = 0-3; X as above), and their hydrates. X can generally be any naturally occurring monocationic amino acid or polypeptide containing arginine, histidine, or lysine. Thus, water-saturated NaSiO<sub>3</sub> and Na<sub>2</sub>WO<sub>4</sub>·2H<sub>2</sub>O were reacted to prepare H<sub>4</sub>SiW<sub>12</sub>O<sub>40</sub>, which was then treated with lysine-HCl to form the corresponding lysinium salt. Antiviral activities of the compds. of the invention, in a variety of assays (in vitro and in vivo), are tabulated. Cytotoxicity and bone marrow toxicity of the compds. were determined. The compds. are useful against e.g. human immunodeficiency virus infection.  
IT 131541-70-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, for retrovirus infection treatment)  
RN 131541-70-3 CAPLUS  
CN L-Histidine, tetracosam-μ-oxododecaoxo[μ<sub>12</sub>-(tetrahydroxyborato(5-)-O:O:O:O':O':O':O':O':O':O':O':O')dodecatungstate(5-)] (9CI) (CA INDEX NAME)  
CM 1  
CRN 12297-12-0  
CMF B O40 W12 . 5 H  
CCI CCS

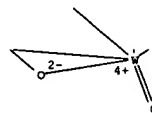
PAGE 1-A



PAGE 2-A

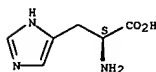


PAGE 3-A

● 5 H<sup>+</sup>

CM 2  
CRN 71-00-1  
CMF C6 H9 N3 O2

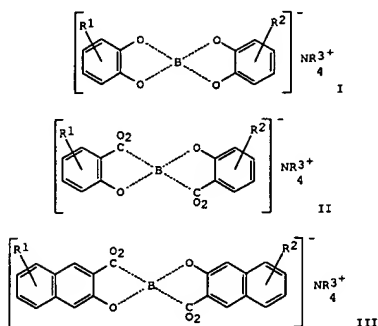
Absolute stereochemistry. Rotation (-).



L12 ANSWER 83 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1991:93563 CAPLUS  
 DOCUMENT NUMBER: 114:93563  
 TITLE: Supporting electrolyte composition for manufacture of solid electrolytic capacitor  
 INVENTOR(S): Koseki, Tetsuya; Tsuji, Tatsunori; Yokoyama, Yutaka  
 PATENT ASSIGNEE(S): Nippon Chemi-Con Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKOXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

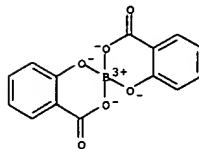
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02166713	A2	19900627	JP 1988-322435	19881221
JP 3076872	B2	20000814	JP 1988-322435	19881221

PRIORITY APPLN. INFO.:  
 OTHER SOURCE(S): MARPAT 114:93563  
 GI



AB The title composition, which is used in electrolytic polymerization for preparing a solid electrolytic layer on a valve metal oxide layer, comprises an aromatic hydroxy compound B complex quaternary ammonium salt I or an aromatic hydroxycarboxylic acid B complex quaternary ammonium salt II or III (R1-2 = H, alkyl, OH, amino, CO2H; R3 = H, Cl-S alkyl; R2-3 may form a cyclic ammonium). An Al foil was coated with a dielec. oxide layer and used as an anode in electrolytic polymerization of pyrrole in the presence of N,N-dimethylpiperidinium borodisalicylate to give a solid electrolyte. A solid electrolytic capacitor using the electrolyte showed thermally stable

L12 ANSWER 83 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 elec. characteristics.  
 IT 131121-99-8 132099-07-1  
 RL: T2M (Technical or engineered material use); USES (Uses) (supporting electrolyte, for electrolytic polymerization, for solid electrolytic capacitor)  
 RN 131121-99-8 CAPLUS  
 CN Piperidinium, 1,1-dimethyl-, (T-4)-bis(2-hydroxybenzoato(2-)-O1,O2)borate(1-) (9CI) (CA INDEX NAME)  
 CH 1  
 CRN 38403-08-6  
 CMF C14 H8 B O6  
 CCI CCS

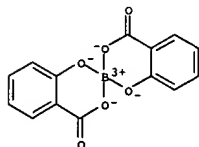


CH 2  
 CRN 15302-91-7  
 CMF C7 H16 N



RN 132099-07-1 CAPLUS  
 CN Pyrrolidinium, 1,1-dimethyl-, bis[2-hydroxymethylbenzoato(2-)-O1,O2)borate(1-) (9CI) (CA INDEX NAME)  
 CH 1  
 CRN 132099-06-0  
 CMF C16 H12 B O6  
 CCI CCS, IDS

L12 ANSWER 83 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



2 (D1-Me)

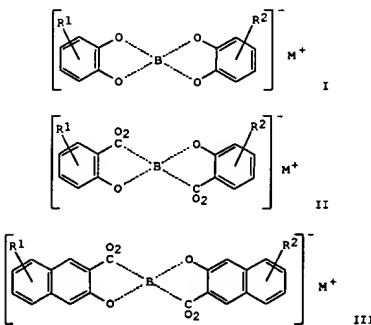
CH 2  
 CRN 15312-12-6  
 CMF C6 H14 N



L12 ANSWER 84 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1991:93562 CAPLUS  
 DOCUMENT NUMBER: 114:93562  
 TITLE: Supporting electrolyte composition for manufacture of solid electrolytic capacitor  
 INVENTOR(S): Koseki, Tetsuya; Tsuji, Tatsunori; Yokoyama, Yutaka  
 PATENT ASSIGNEE(S): Nippon Chemi-Con Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKOXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

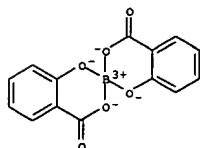
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02166712	A2	19900627	JP 1988-322436	19881221
JP 3076873	B2	20000814	JP 1988-322436	19881221

PRIORITY APPLN. INFO.:  
 OTHER SOURCE(S): MARPAT 114:93562  
 GI



AB The title composition, which is used in electrolytic polymerization for preparing a solid electrolytic layer on a valve metal oxide layer, comprises an aromatic hydroxy compound B complex amine salt I or an aromatic hydroxycarboxylic acid B complex amine salt II or III (R1-2 = H, alkyl, OH, amino, CO2H; M = amine). An Al foil was coated with a dielec. oxide layer and used as an anode in electrolytic polymerization of pyrrole in the presence of Et3N borodisalicylate to give a solid electrolyte. A solid electrolytic capacitor using the electrolyte showed thermally stable elec. characteristics.

L12 ANSWER 84 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 IT 131122-00-4 131122-01-5  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (supporting electrolyte, for electrolytic polymerization, for solid  
 electrolytic capacitor)  
 RN 131122-00-4 CAPLUS  
 CN Borate(1-), bis[2-hydroxybenzoato(2-)-O1,O2]-, (T-4)-, hydrogen, compd.  
 with 1-ethylpiperidine (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 22450-97-1  
 CMF C14 H8 B O6 . H  
 CCI CCS



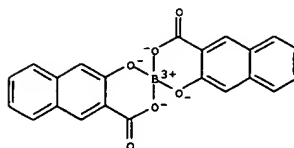
● H<sup>+</sup>

CM 2  
 CRN 766-09-6  
 CMF C7 H15 N



RN 131122-01-5 CAPLUS  
 CN Pyrrolidinium, 1,1-dimethyl-, (T-4)-bis[3-hydroxy-2-naphthalenecarboxylato(2-)-O2,O3]borate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 47611-21-2  
 CMF C22 H12 B O6  
 CCI CCS

L12 ANSWER 84 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

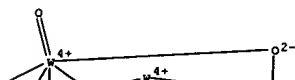


CM 2  
 CRN 15312-12-6  
 CMF C6 H14 N

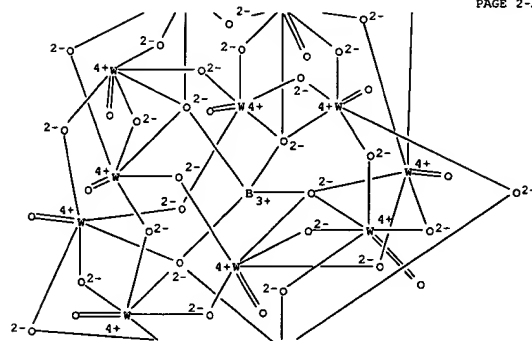


L12 ANSWER 85 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1991:43249 CAPLUS  
 DOCUMENT NUMBER: 114:43249  
 TITLE: Compounds of borotungstic acid with nitrogen  
 compounds  
 AUTHOR(S): Chaigneau, M.  
 CORPORATE SOURCE: Lab. Gaz, Paris, F 75270, Fr.  
 SOURCE: Annales Pharmaceutiques Francaises (1990), 48(1),  
 42-4  
 CODEN: APFRAD; ISSN: 0003-4509  
 DOCUMENT TYPE: Journal  
 LANGUAGE: French  
 AB Alkaloids such as quinine, cinchonine, brucine, morphine, strychnine, and  
 nitrogenous compds., e.g., procaine, choline, were allowed to react with  
 borotungstic acid and shown to form borotungstates.  
 IT 130555-54-3P 130555-55-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 130555-54-3 CAPLUS  
 CN Tungstate(5-), tetracosam-μ-oxododecaoxo[μ12-[tetrahydroxyborato(5-)-  
 O:O:O:O':O':O':O':O':O':O':O':O':O':O':O':O']dodeca-, pentahydrogen, compd.  
 with (3S-cis)-3-ethylidihydro-4-[(1-methyl-1H-imidazol-5-yl)methyl]-2(3H)-  
 furanone (1:5) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 12297-12-0  
 CMF B O40 W12 . 5 H  
 CCI CCS

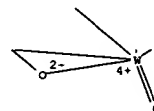
PAGE 1-A



L12 ANSWER 85 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 PAGE 2-A



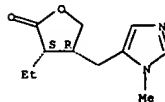
PAGE 3-A



● 5 H<sup>+</sup>

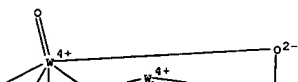
CM 2  
 CRN 92-13-7  
 CMF C11 H16 N2 O2

Absolute stereochemistry.

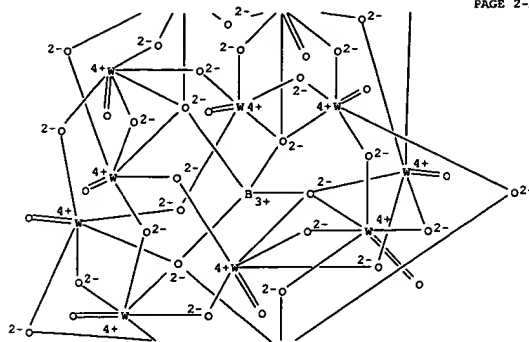


RN 130555-55-4 CAPLUS  
 CN Tungstate(5-), tetracosam- $\mu$ -oxododecaoxo[ $\mu$ 12-[tetrahydroxyborato(5-)-  
 O:O:O:O':O':O':O':O':O':O':O':O']dodeca-, pentahydrogen, compd.  
 with (S)-3-(1-methyl-2-pyrrolidinyl)pyridine (1:4) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 12297-12-0  
 CMF B O40 W12 . 5 H  
 CCI CCS

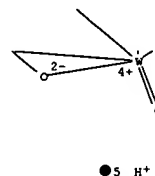
PAGE 1-A



PAGE 2-A



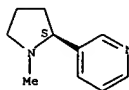
PAGE 3-A



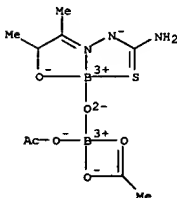
CM 2

CRN 54-11-5  
 CMF C10 H14 N2

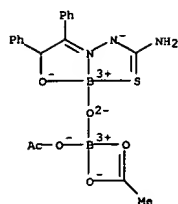
Absolute stereochemistry. Rotation (-).



L12 ANSWER 86 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1990:244848 CAPLUS  
 DOCUMENT NUMBER: 112:244848  
 TITLE: Synthetic and structural studies of some  
 tetracoordinated boron complexes of bifunctional  
 tridentate Schiff bases  
 AUTHOR(S): Singh, V. P.; Singh, R. V.; Tandon, J. P.  
 CORPORATE SOURCE: Dep. Chem., Univ. Rajasthan, Jaipur, 302004, India  
 SOURCE: Journal fuer Praktische Chemie (Leipzig) (1989),  
 331(4), 690-6  
 CODEN: JPCEAO; ISSN: 0021-8383  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB ((AcO)2B)2O reacted with RRLC:NHHC(S)NH2 (H2L; R = CHOHCH3, R1 = Me; R =  
 2-C6H4OH, R1 = H, Me; R = 2-hydroxy-1-naphthyl, R1 = H; R = CHOHPh, R1 =  
 Ph) to give (AcO)2BOBL and [LB]2O. L are tridentate, coordinating  
 through  
 the O, S, and N atoms. The complexes were characterized by IR and 11B  
 and  
 1H NMR spectra.  
 IT 127465-88-7# 127465-92-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 127465-88-7 CAPLUS  
 CN Boron, (acetato-O) (acetato-O,O') [2-(2-hydroxy-1-  
 methylpropylidene)hydrazinecarbothioamidato(2-)-N2,O2,S]- $\mu$ -oxodi- (9CI)  
 (CA INDEX NAME)



RN 127465-92-3 CAPLUS  
 CN Boron, (acetato-O) (acetato-O,O') [2-(2-hydroxy-1,2-  
 diphenylethylidene)hydrazinecarbothioamidato(2-)-N2,O2,S]- $\mu$ -oxodi-  
 (9CI) (CA INDEX NAME)



L12 ANSWER 87 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1989:632934 CAPLUS  
 DOCUMENT NUMBER: 111:232934  
 TITLE: Studies on spiroborate complexes. Part III. Fast-atom-bombardment mass spectrometry of bis-catechol spiroborate and its analogs  
 AUTHOR(S): Okamoto, Yoshihisa; Takei, Yuka; Rose, Malcolm E.  
 CORPORATE SOURCE: Coll. Lib. Arts Sci., Kitasato Univ., Sagami-hara, 228, Japan  
 SOURCE: International Journal of Mass Spectrometry and Ion Processes (1989), 87(2), 225-35  
 CODEN: IJNPDM; ISSN: 0168-1176  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Neg.-ion fast-atom-bombardment mass spectra of 40 spiroborate complexes are simple and highly diagnostic of the structures of the borate anions. In hydroxylic liquid matrixes, exchange of the spiroborate ligand and solvent mols. occurs slowly on the probe tip. This interference is particularly noticeable with glycerol as solvent. The repercussions of

in situ ligand exchange for studies of other anions are discussed. Pos.-ion fast-atom-bombardment mass spectra can be used to identify readily the counter-cations in the spiroborate complexes.

IT 111932-23-1 111932-24-2 111932-28-6  
 111932-30-0 111932-31-1 111932-32-2  
 111932-34-4 111932-35-5 123738-44-3  
 123738-46-5 123738-48-7 123778-58-5  
 123778-60-9

RL: FRP (Properties)

(fast-atom-bombardment mass spectrum of)

RN 111932-23-1 CAPLUS

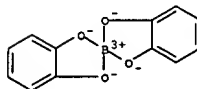
CN Borate(1-), bis[1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 22450-98-2

CMF C12 H8 B O4 . H

CCI CCS



● H<sup>+</sup>

CM 2

CRN 695-34-1

CMF C6 H8 N2



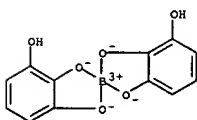
RN 111932-24-2 CAPLUS  
 CN Borate(1-), bis[1,2-benzenetriolato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 46944-61-0

CMF C12 H8 B O6 . H

CCI CCS



● H<sup>+</sup>

CM 2

CRN 695-34-1

CMF C6 H8 N2



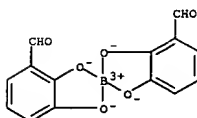
RN 111932-28-6 CAPLUS  
 CN Borate(1-), bis[2,3-dihydroxybenzaldehydato(2-)-O2,O3]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 111932-27-5

CMF C14 H8 B O6 . H

CCI CCS



● H<sup>+</sup>

CM 2

CRN 695-34-1

CMF C6 H8 N2



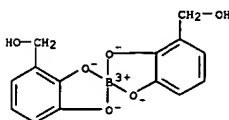
RN 111932-30-0 CAPLUS  
 CN Borate(1-), bis[3-(hydroxymethyl)-1,2-benzenediolato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 111932-29-7

CMF C14 H12 B O6 . H

CCI CCS



● H<sup>+</sup>

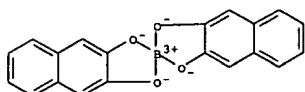
L12 ANSWER 87 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CM 2  
CRN 695-34-1  
CMF C6 H8 N2



RN 111932-31-1 CAPLUS  
CN Borate(1-), bis[2,3-naphthalenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1  
CRN 47422-29-7  
CMF C20 H12 B O4 . H  
CCI CCS



● H<sup>+</sup>

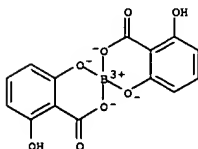
CM 2  
CRN 695-34-1  
CMF C6 H8 N2



RN 111932-32-2 CAPLUS  
CN Borate(1-), bis[2-hydroxybenzoato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1  
CRN 22450-97-1

L12 ANSWER 87 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● H<sup>+</sup>

CM 2  
CRN 695-34-1  
CMF C6 H8 N2

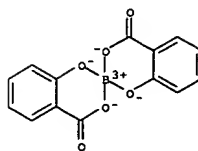


RN 111932-35-5 CAPLUS  
CN Borate(1-), bis[[1,1'-biphenyl]-2,2'-diolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1  
CRN 53993-02-5  
CMF C24 H16 B O4 . H  
CCI CCS

L12 ANSWER 87 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CMF C14 H8 B O6 . H  
CCI CCS



● H<sup>+</sup>

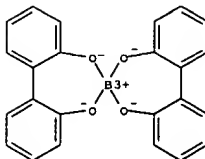
CM 2  
CRN 695-34-1  
CMF C6 H8 N2



RN 111932-34-4 CAPLUS  
CN Borate(1-), bis[2,6-dihydroxybenzoato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1  
CRN 95692-94-7  
CMF C14 H8 B O8 . H  
CCI CCS

L12 ANSWER 87 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● H<sup>+</sup>

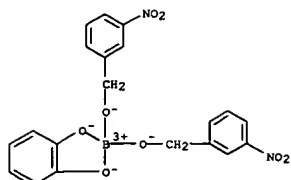
CM 2  
CRN 695-34-1  
CMF C6 H8 N2



RN 123738-44-3 CAPLUS  
CN Borate(1-), [1,2-benzenediolato(2-)-O,O']bis(3-nitrobenzenemethanolato-Oo)-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1  
CRN 123738-43-2  
CMF C20 H16 B N2 O8 . H  
CCI CCS



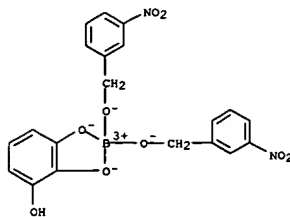
● H<sup>+</sup>

CM 2

CRN 695-34-1  
CMF C6 H8 N2

RN 123738-46-5 CAPLUS  
CN Borate(1-),  
[1,2,3-benzenetriolato(2-)-O1,O2]bis(3-nitrobenzenemethanolato-  
Oa)-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1)  
(9CI) (CA INDEX NAME)

CM 1

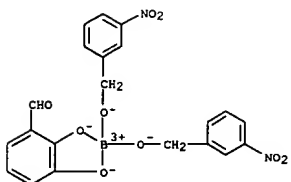
CRN 123738-45-4  
CMF C20 H16 B N2 O9 . H  
CCI CCS● H<sup>+</sup>

CM 2

CRN 695-34-1  
CMF C6 H8 N2

RN 123738-46-7 CAPLUS  
CN Borate(1-), (2,3-dihydroxybenzaldehydato(2-)-O2,O3]bis(3-  
nitrobenzenemethanolato-Oa)-, (T-4)-, hydrogen, compd. with  
4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

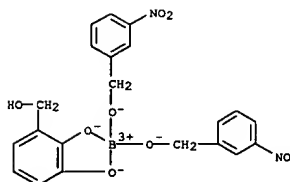
CRN 123738-47-6  
CMF C21 H16 B N2 O9 . H  
CCI CCS● H<sup>+</sup>

CM 2

CRN 695-34-1  
CMF C6 H8 N2

RN 123778-58-5 CAPLUS  
CN Borate(1-), [3-(hydroxymethyl)-1,2-benzenediolato(2-)-O1,O2]bis(3-  
nitrobenzenemethanolato-Oa)-, (T-4)-, hydrogen, compd. with  
4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 123778-57-4  
CMF C21 H18 B N2 O9 . H  
CCI CCS● H<sup>+</sup>

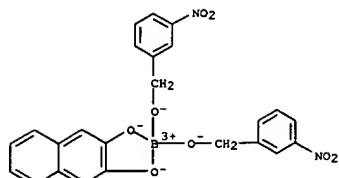
CM 2

CRN 695-34-1  
CMF C6 H8 N2

RN 123778-60-9 CAPLUS  
CN Borate(1-), [2,3-naphthalenediolato(2-)-O,O']bis(3-nitrobenzenemethanolato-  
Oa)-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1)  
(9CI) (CA INDEX NAME)

CM 1

CRN 123778-59-6  
CMF C24 H18 B N2 O8 . H  
CCI CCS

● H<sup>+</sup>

CM 2  
CRN 695-34-1  
CMF C6 H8 N2



IT 123738-49-8P 123778-62-1P 123778-64-3P  
123778-66-5P  
RL: FRP (Properties); PREP (Preparation)  
(formation and fast-atom-bombardment mass spectrum of)  
RN 123738-49-8 CAPLUS  
CN Borate(1-), bis[1,2,3-propanetriolato(2-)-O1,O2]-, (T-4)-, hydrogen,  
compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

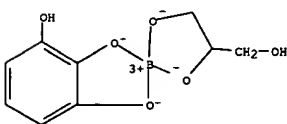
CM 1  
CRN 49625-59-4  
CMF C6 H12 B O6 . H  
CCI CCS

CRN 695-34-1  
CMF C6 H8 N2



RN 123778-64-3 CAPLUS  
CN Borate(1-), [1,2,3-benzenetriolato(2-)-O1,O2][1,2,3-propanetriolato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

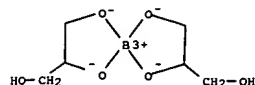
CM 1  
CRN 123778-63-2  
CMF C9 H10 B O6 . H  
CCI CCS

● H<sup>+</sup>

CM 2  
CRN 695-34-1  
CMF C6 H8 N2



RN 123778-66-5 CAPLUS  
CN Borate(1-), [3-(hydroxymethyl)-1,2-benzenediolato(2-)-O1,O2][1,2,3-propanetriolato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with

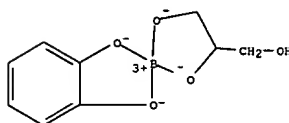
● H<sup>+</sup>

CM 2  
CRN 695-34-1  
CMF C6 H8 N2



RN 123778-62-1 CAPLUS  
CN Borate(1-), [1,2-benzenediolato(2-)-O,O'] [1,2,3-propanetriolato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

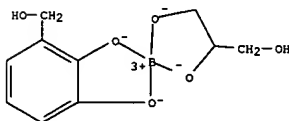
CM 1  
CRN 123778-61-0  
CMF C9 H10 B O5 . H  
CCI CCS

● H<sup>+</sup>

CM 2

CM 1

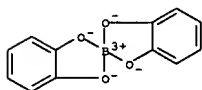
CRN 123778-65-4  
CMF C10 H12 B O6 . H  
CCI CCS

● H<sup>+</sup>

CM 2  
CRN 695-34-1  
CMF C6 H8 N2



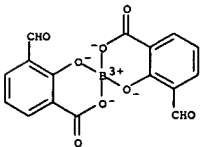
L12 ANSWER 88 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1989:96437 CAPLUS  
 DOCUMENT NUMBER: 110:96437  
 TITLE: Organoboron antioxidants. Part 1. Boric acid derivatives as primary antioxidants  
 AUTHOR(S): Koenig, T.; Maennel, D.; Habicher, W. D.; Schwetlick, K.  
 CORPORATE SOURCE: Dep. Chem., Dresden Univ. Technol., Dresden,  
 DDR-8027,  
 SOURCE: Ger. Dem. Rep.  
 Polymer Degradation and Stability (1988), 22(2), 137-45  
 CODEN: PDSTDW; ISSN: 0141-3910  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Organoboron compds., particularly boric acid esters and arylboronic acid derivs., are known to be good antioxidants. The inhibiting activities of various B compds. are compared with those of phenolic antioxidants and phosphites. Whereas in the autoxidn. of polypropylene, aryl borates give rise to approx. the same induction periods as the constituent phenols, aryl phenylboronates are, to some extent, considerably better. For the calcn. of kinetic data, particularly the rate consts. (k7) of the reaction with peroxy radicals and the stoichiometric factor (f), investigations into the inhibiting activity of B compds. in the initiated oxidation of cumene at low temps. are used. The rate constant k7 of aryl phenylboronates is approx. 10 times greater than that for structurally analogous phosphites, whereas aryl borates can be regarded as depots for phenols.  
 IT 119177-56-9  
 RL: USBS (Uses)  
 (antioxidants, for cumene and polypropylene)  
 RN 119177-56-9 CAPLUS  
 CN Borate(1-), bis[1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 2,2,6,6-tetramethyl-4-piperidinone (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 22450-98-2  
 CMF C12 H8 B O4 . H  
 CCI CCS



● H<sup>+</sup>

CM 2  
 CRN 826-36-8  
 CMF C9 H17 N O  
 CCI CCS

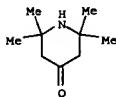
L12 ANSWER 89 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1988:406562 CAPLUS  
 DOCUMENT NUMBER: 109:6562  
 TITLE: Reactions of boric acid with 3-formylsalicylic acid, glycolic acid, and benzoic acid leading to the synthesis of 3-formylsalicylato-, glycolato-, and benzilato-borate (III) salts  
 AUTHOR(S): Dey, K.; Gangopadhyay, A.; Biswas, A. K.  
 CORPORATE SOURCE: Dep. Chem., Univ. Kalyani, Kalyani, 741 235, India  
 SOURCE: Journal of Bangladesh Academy of Sciences (1987), 11(1), 55-66  
 CODEN: JBACDF; ISSN: 0378-8121  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Reaction of B(OH)<sub>3</sub> with 3-formylsalicylic acid, glycolic acid, and benzoic acid in the presence of various large cations afforded bis- and mono-3-formylsalicylato-, glycolato- and benzilato-borate(III) salts with large cations. The phys. and spectroscopic properties of these new borate(III) salts are reported. Synthesis and characterization of the neutral four-coordinate boron compound [LB(OH)(py)] (L = 3-formylsalicylato) is also discussed.  
 IT 114803-05-3P 114803-10-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 114803-05-3 CAPLUS  
 CN Borate(1-), bis[3-formyl-2-hydroxybenzoato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 114803-04-2  
 CMF C16 H8 B O8 . H  
 CCI CCS



● H<sup>+</sup>

CM 2  
 CRN 110-86-1  
 CMF C5 H5 N  
 CCI CCS

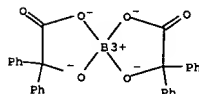
L12 ANSWER 88 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L12 ANSWER 89 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 114803-10-0 CAPLUS  
 CN Borate(1-), bis[α-hydroxy-α-phenylbenzeneacetato(2-)]-, (T-4)-, hydrogen, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 95692-86-7  
 CMF C28 H20 B O6 . H  
 CCI CCS

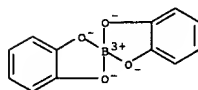


● H<sup>+</sup>

CM 2  
 CRN 110-86-1  
 CMF C5 H5 N  
 CCI CCS



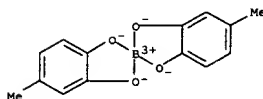
L12 ANSWER 90 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1988:84752 CAPLUS  
 DOCUMENT NUMBER: 108:84752  
 TITLE: Studies on spiroborate complexes - II. Structural elucidation of bisocatechol spiroborate and its analogs  
 AUTHOR(S): by NMR and mass spectral spectroscopy  
 CORPORATE SOURCE: Okamoto, Yoshihisa; Takei, Yuka; Takagi, Kaname  
 Coll. Lib. Arts Sci., Kitasato Univ., Sagamihara, 228,  
 Japan  
 SOURCE: Polyhedron (1987), 6(12), 2119-28  
 CODEN: PLYHDE; ISSN: 0277-5387  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Nine spiroborate complexes were analyzed by NMR and mass spectroscopy, and the characteristic spectra and fragmentation patterns are reported. On the basis of these results, the structure of J. Meulenhoff's (1925) free acid was reinvestigated.  
 IT 111932-23-1 111932-24-2 111932-26-4  
 111932-28-6 111932-30-0 111932-31-1  
 111932-32-2 111932-34-4 111932-35-5  
 RL: PRP (Properties)  
 (NMR and mass spectra and structure of)  
 RN 111932-23-1 CAPLUS  
 CN Borate(1-), bis[1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 22450-98-2  
 CMF C12 H8 B O4 . H  
 CCI CCS



● H<sup>+</sup>

CM 2  
 CRN 695-34-1  
 CMF C6 H8 N2

L12 ANSWER 90 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



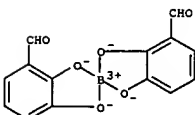
● H<sup>+</sup>

CM 2  
 CRN 695-34-1  
 CMF C6 H8 N2



RN 111932-28-6 CAPLUS  
 CN Borate(1-), bis[2,3-dihydroxybenzaldehydato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1  
 CRN 111932-27-5  
 CMF C14 H8 B O6 . H  
 CCI CCS



● H<sup>+</sup>

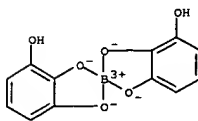
CM 2  
 CRN 695-34-1

L12 ANSWER 90 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 111932-24-2 CAPLUS  
 CN Borate(1-), bis[1,2,3-benzenetriolato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1  
 CRN 46944-61-0  
 CMF C12 H8 B O6 . H  
 CCI CCS



● H<sup>+</sup>

CM 2  
 CRN 695-34-1  
 CMF C6 H8 N2



RN 111932-26-4 CAPLUS  
 CN Borate(1-), bis[4-methyl-1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

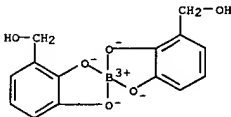
CM 1  
 CRN 111932-25-3  
 CMF C14 H12 B O4 . H  
 CCI CCS

L12 ANSWER 90 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 111932-30-0 CAPLUS  
 CN Borate(1-), bis[3-(hydroxymethyl)-1,2-benzenediolato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1  
 CRN 111932-29-7  
 CMF C14 H12 B O6 . H  
 CCI CCS



● H<sup>+</sup>

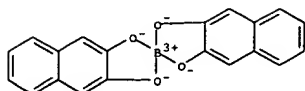
CM 2  
 CRN 695-34-1  
 CMF C6 H8 N2



RN 111932-31-1 CAPLUS  
 CN Borate(1-), bis[2,3-naphthalenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1  
 CRN 47422-29-7

L12 ANSWER 90 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 CMF C20 H12 B O4 . H  
 CCI CCS



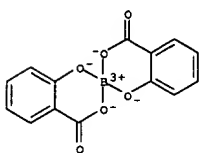
● H<sup>+</sup>

CM 2  
 CRN 695-34-1  
 CMF C6 H8 N2



RN 111932-32-2 CAPLUS  
 CN Borate(1-), bis[2-hydroxybenzoato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

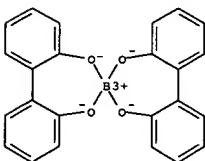
CM 1  
 CRN 22450-97-1  
 CMF C14 H8 B O6 . H  
 CCI CCS



● H<sup>+</sup>

L12 ANSWER 90 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1  
 CRN 53993-02-5  
 CMF C24 H16 B O4 . H  
 CCI CCS



● H<sup>+</sup>

CM 2  
 CRN 695-34-1  
 CMF C6 H8 N2



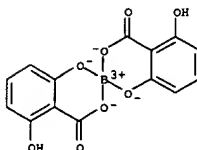
L12 ANSWER 90 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CM 2  
 CRN 695-34-1  
 CMF C6 H8 N2



RN 111932-34-4 CAPLUS  
 CN Borate(1-), bis[2,6-dihydroxybenzoato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1  
 CRN 95692-94-7  
 CMF C14 H8 B O8 . H  
 CCI CCS



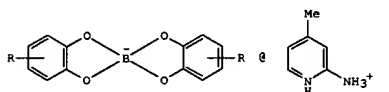
● H<sup>+</sup>

CM 2  
 CRN 695-34-1  
 CMF C6 H8 N2



RN 111932-35-5 CAPLUS  
 CN Borate(1-), bis[1,1'-biphenyl]-2,2'-diolato(2-)-O,O']-, (T-4)-, hydrogen,

L12 ANSWER 91 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1988:21943 CAPLUS  
 DOCUMENT NUMBER: 108:21943  
 TITLE: Studies on spiroborate complexes - I. A new synthesis of bis-catechol spiroborate and its analogs using 2-amino-4-methylpyridine borane  
 AUTHOR(S): Okamoto, Yoshihisa; Kinoshita, Toshio; Takei, Yuka; Matsumoto, Yoshio  
 CORPORATE SOURCE: Sch. Pharm. Sci., Kitasato Univ., Tokyo, 108, Japan  
 SOURCE: Polyhedron (1986), 5(12), 2051-7  
 CODEN: PLYHDE; ISSN: 0277-5387  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



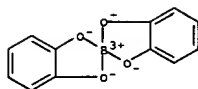
AB A new synthesis of bis-catechol spiroborate and its analogs are described.

Five-, six- and seven-membered spiroborates are obtained. Thus, reaction of 1,2-(HO)2C6H3R (R = H, 3-OH, 4-Me, 3-CHO) with 2-amino-4-methylpyridine borane in HC(OEt)3 yielded spiroborates I (same R). Spiroborates of 2,3-dihydroxynaphthalene, salicylic acid, 2,6-dihydroxybenzoic acid, and 2,2'-dihydroxybiphenyl were also prepared. A mechanism is proposed where the reaction is initiated by removal of a phenolic proton by the orthoformate solvent.

IT 111932-23-1P 111932-24-2P 111932-26-4P  
 111932-28-6P 111932-30-0P 111932-31-1P  
 111932-32-2P 111932-34-4P 111932-35-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 111932-23-1 CAPLUS  
 CN Borate(1-), bis[1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1  
 CRN 22450-98-2  
 CMF C12 H8 B O4 . H  
 CCI CCS

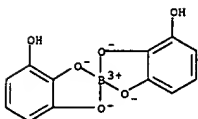
● H<sup>+</sup>

CM 2

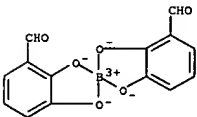
CRN 695-34-1  
CMF C6 H8 N2

RN 111932-24-2 CAPLUS  
CN Borate(1-), bis[1,2,3-benzenetriolato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 46944-61-0  
CMF C12 H8 B O6 . H  
CCI CCS● H<sup>+</sup>

CM 2

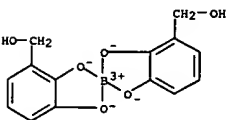
CRN 695-34-1  
CMF C6 H8 N2● H<sup>+</sup>

CM 2

CRN 695-34-1  
CMF C6 H8 N2

RN 111932-30-0 CAPLUS  
CN Borate(1-), bis[3-(hydroxymethyl)-1,2-benzenediolato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

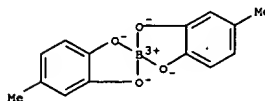
CRN 111932-29-7  
CMF C14 H12 B O6 . H  
CCI CCS● H<sup>+</sup>

CM 2



RN 111932-26-4 CAPLUS  
CN Borate(1-), bis[4-methyl-1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 111932-25-3  
CMF C14 H12 B O4 . H  
CCI CCS● H<sup>+</sup>

CM 2

CRN 695-34-1  
CMF C6 H8 N2

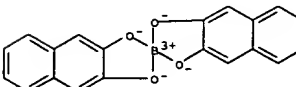
RN 111932-28-6 CAPLUS  
CN Borate(1-), bis[2,3-dihydroxybenzaldehydato(2-)-O2,O3]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 111932-27-5  
CMF C14 H8 B O6 . H  
CCI CCSCRN 695-34-1  
CMF C6 H8 N2

RN 111932-31-1 CAPLUS  
CN Borate(1-), bis[2,3-naphthalenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 47422-29-7  
CMF C20 H12 B O4 . H  
CCI CCS● H<sup>+</sup>

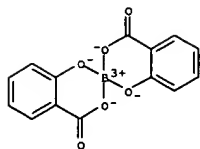
CM 2

CRN 695-34-1  
CMF C6 H8 N2

RN 111932-32-2 CAPLUS  
CN Borate(1-), bis[2-hydroxybenzoato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 22450-97-1  
CMF C14 H8 B O6 . H



● H<sup>+</sup>

CM 2

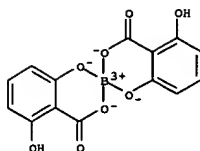
CRN 695-34-1  
CMF C6 H8 N2



RN 111932-34-4 CAPLUS  
CN Borate(1-), bis[2,6-dihydroxybenzoato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 95692-94-7  
CMF C14 H8 B O8 . H  
CCI CCS



● H<sup>+</sup>

CM 2

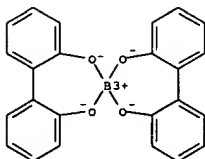
CRN 695-34-1  
CMF C6 H8 N2



RN 111932-35-5 CAPLUS  
CN Borate(1-), bis[[1,1'-biphenyl]-2,2'-diolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 4-methyl-2-pyridinamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 53993-02-5  
CMF C24 H16 B O4 . H  
CCI CCS



● H<sup>+</sup>

CM 2

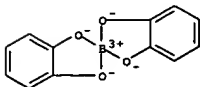
CRN 695-34-1  
CMF C6 H8 N2



L12 ANSWER 92 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1987:206657 CAPLUS  
DOCUMENT NUMBER: 106:206657  
TITLE: Synthesis and study of new boron complexes  
AUTHOR(S): Grachev, V. I.; Naumova, S. F.; Shelemova, I. V.  
CORPORATE SOURCE: Inst. Fiz.-Org. Khim., Minsk, USSR  
SOURCE: Vestsi Akademii Navuk BSSR, Seriya Khimichnykh Navuk (1987), (1), 116-18  
CODEN: VBSKAK; ISSN: 0002-3590  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
AB H3BO3 reacted with pyrocatechol (H2L) in presence of N bases to give HQ[BL2] (Q = 2,4-lutidine, 2-methylquinoline, piperazine, nicotinamide, 2-hydroxypyrrolidine). The complexes were characterized by IR spectra. The herbicidal and antibacterial activities of HQ[BL2] and the quinoline, piperidine and pyridine analogs were studied. Comps. containing a pyridine ring are more effective antibacterial agents; the quinoline and piperidine are the more effective herbicides.  
IT 108339-50-0 108339-52-2  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (antibacterial and herbicidal activity of)  
RN 108339-50-0 CAPLUS  
CN Borate(1-), bis[1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with piperidine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 22450-98-2  
CMF C12 H8 B O4 . H  
CCI CCS



● H<sup>+</sup>

CM 2

CRN 110-89-4  
CMF C5 H11 N

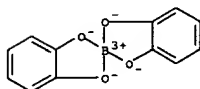


L12 ANSWER 92 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 108339-52-2 CAPLUS  
CN Borate(1-), bis[1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 22450-98-2  
CMF C12 H8 B O4 . H  
CCI CCS



● H<sup>+</sup>

CM 2

CRN 110-86-1  
CMF C5 H5 N



IT 108339-53-3P 108339-55-5P 108339-56-6P  
108357-04-6P

RL: SPN (Synthetic preparation): PREP (Preparation)  
(preparation and antibacterial and herbicidal activity of)

RN 108339-53-3 CAPLUS  
CN Borate(1-), bis[1,2-benzenediolato(2-)-κO,κO']-, (T-4)-, hydrogen, compd. with 2,4-dimethylpyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 22450-98-2  
CMF C12 H8 B O4 . H  
CCI CCS

L12 ANSWER 92 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 108339-56-6 CAPLUS  
CN Borate(1-), bis[1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 2-pyrrolidinol (1:1) (9CI) (CA INDEX NAME)

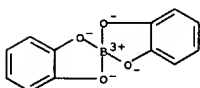
CM 1

CRN 67318-87-0  
CMF C4 H9 N O



CM 2

CRN 22450-98-2  
CMF C12 H8 B O4 . H  
CCI CCS



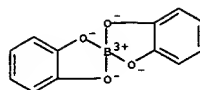
● H<sup>+</sup>

RN 108357-04-6 CAPLUS  
CN Borate(1-), bis[1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with 3-pyridinecarboxamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 22450-98-2  
CMF C12 H8 B O4 . H  
CCI CCS

L12 ANSWER 92 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● H<sup>+</sup>

CM 2

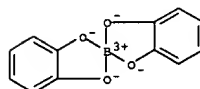
CRN 108-47-4  
CMF C7 H9 N



RN 108339-55-5 CAPLUS  
CN Borate(1-), bis[1,2-benzenediolato(2-)-O,O']-, (T-4)-, hydrogen, compd. with piperazine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 22450-98-2  
CMF C12 H8 B O4 . H  
CCI CCS

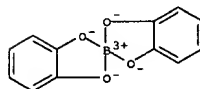


● H<sup>+</sup>

CM 2

CRN 110-85-0  
CMF C4 H10 N2

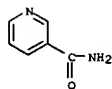
L12 ANSWER 92 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● H<sup>+</sup>

CM 2

CRN 98-92-0  
CMF C6 H6 N2 O



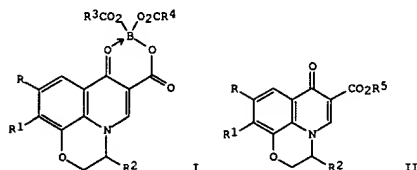


L12 ANSWER 93 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1986:553293 CAPLUS  
 DOCUMENT NUMBER: 105:153293  
 TITLE: Boron chelate compounds  
 PATENT ASSIGNEE(S): Daiichi Seliyaku Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60075489	A2	19850427	JP 1983-184817	19831003
JP 04075239	B4	19921130		

PRIORITY APPLN. INFO.: JP 1983-184817 19831003

OTHER SOURCE(S): CASREACT 105:153293  
 GI



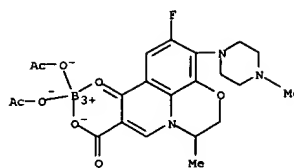
AB Title chelates I (R, R1 = halo; R2 = H, alkyl; R3, R4 = aryl, alkyl, haloalkyl), intermediates for preparing antibacterial substances II (R1 = 4-(substituted)-1-piperazinyl; R5 = H), were prepared Thus, refluxing H3BO3, (EtCO)2O, and II (R = R1 = F; R2 = Me; R5 = Et) gave 95.2% I (R3 = R4 = Et) which was stirred with 4-methylpiperazine and neutralized to give 83.9% II (R1 = 4-methyl-1-piperazinyl; R5 = H).

IT 97746-90-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and neutralization of)

RN 97746-90-2 CAPLUS

CN Boron, bis(acetato-O) [9-fluoro-2,3-dihydro-3-methyl-10-(4-methyl-1-piperazinyl)-7-oxo-7H-pyrido[1,2,3-de]-1,4-benzoxazine-6-carboxylato-6,07]-, (T-4)- (9CI) (CA INDEX NAME)

L12 ANSWER 93 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

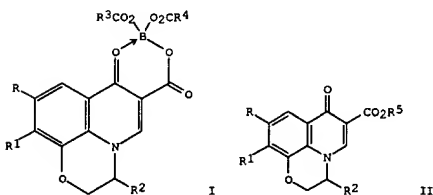


L12 ANSWER 94 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1985:523491 CAPLUS  
 DOCUMENT NUMBER: 103:123491  
 TITLE: Oxazines  
 PATENT ASSIGNEE(S): Daiichi Seliyaku Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60078986	A2	19850504	JP 1983-188138	19831007
JP 03072073	B4	19911115		

PRIORITY APPLN. INFO.: JP 1983-188138 19831007

OTHER SOURCE(S): CASREACT 103:123491  
 GI



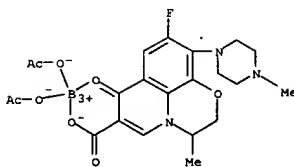
AB Chelate dissociation of I [R = halo; R1 = (4-alkyl)-1-piperazinyl; R2 = H, alkyl; R3, R4 = aryl, alkyl, haloalkyl], prepared from I (R1 = halo) and (alkyl)piperazine, gave II having antibacterial activities. Thus, refluxing H3BO3, (EtCO)2O, and II (R = R1 = F; R2 = Me; R5 = Et) gave 95.2% I (R3 = R4 = Et), which was stirred with 4-methylpiperazine and neutralized to give 83.9% II (R1 = 4-methyl-1-piperazinyl; R5 = H).

IT 97746-90-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and neutralization of)

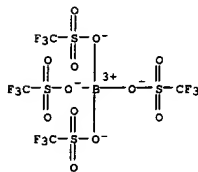
RN 97746-90-2 CAPLUS

CN Boron, bis(acetato-O) [9-fluoro-2,3-dihydro-3-methyl-10-(4-methyl-1-piperazinyl)-7-oxo-7H-pyrido[1,2,3-de]-1,4-benzoxazine-6-carboxylato-6,07]-, (T-4)- (9CI) (CA INDEX NAME)

L12 ANSWER 94 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

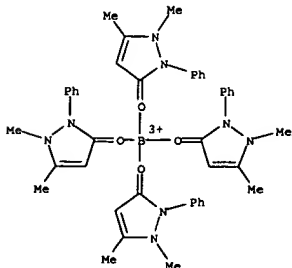


L12 ANSWER 95 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1984:603144 CAPLUS  
 DOCUMENT NUMBER: 101:203144  
 TITLE: Contributions to the chemistry of boron. 148.  
 Diamidoboron(1+) cations from bis(amino)borohalides  
 by halide abstraction  
 AUTHOR(S): Noeth, Heinrich; Rasthofer, Bernhard; Weber, Siegfried  
 CORPORATE SOURCE: Inst. Anorg. Chem., Univ. Muenchen, Munich, D-8000/2, Fed. Rep. Ger.  
 SOURCE: Zeitschrift fuer Naturforschung, Teil B: Chemie, Organische Chemie (1984), 39B(8), 1058-68  
 CODEN: ZNBAD2; ISSN: 0340-5087  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 AB Bis(amido)boron(1+) cations can be generated from bis(amino)boron halides and an appropriate halide acceptor. The ease of formation of the (Et<sub>2</sub>N)RB<sup>+</sup> (R = 2,2,6,6-tetramethylpiperidinyl) cation from (Et<sub>2</sub>N)RBX (X = halide) was studied and found to increase with decreasing strength of the B-X bond. R<sub>2</sub>BF react with MCl<sub>3</sub> (M = Al, Ga) or BX<sub>3</sub> (X = Cl, Br, F) to give [R<sub>2</sub>B]MCl<sub>4</sub> or [R<sub>2</sub>B]BX<sub>4</sub>, resp. [R<sub>2</sub>B]BBr<sub>4</sub> reacts with AgO<sub>3</sub>SCF<sub>3</sub> to yield [R<sub>2</sub>B](O<sub>3</sub>SCF<sub>3</sub>)<sub>4</sub>. R<sub>2</sub>BCl, obtained from [R<sub>2</sub>B]BCl<sub>4</sub> in boiling pyridine, readily gives [R<sub>2</sub>B]MCl<sub>4</sub> (M = metal). R<sub>2</sub>B(O<sub>3</sub>SCF<sub>3</sub>) is formed by reaction of R<sub>2</sub>BCl with AgO<sub>3</sub>SCF<sub>3</sub>.  
 IT 92816-40-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 92816-40-5 CAPLUS  
 CN Piperidinium, 2,2,6,6-tetramethyl-1-[(2,2,6,6-tetramethyl-1-piperidinyl)borylene]-, tetrakis(trifluoromethanesulfonato-O)borate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 92816-39-2  
 CMF C4 B F12 O12 S4  
 CCI CCS



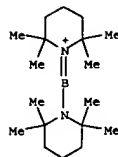
CM 2  
 CRN 92785-26-7  
 CMF C18 H36 B N2

L12 ANSWER 96 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1983:82717 CAPLUS  
 DOCUMENT NUMBER: 98:82717  
 TITLE: Acid-catalyzed electrophilic substitutions of 1,2-dihydro-1,5-dimethyl-2-phenyl-3H-pyrazol-3-one (phenazone)  
 AUTHOR(S): Akquen, Eyuep  
 CORPORATE SOURCE: Inst. Pharm. Lebensmittelchem., Univ. Wuerzburg, Wuerzburg, D-8700, Fed. Rep. Ger.  
 SOURCE: Chemiker-Zeitung (1982), 106(10), 371-3  
 CODEN: CMKZAT; ISSN: 0009-2894  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 AB [R(O)X] (RO = 1,5-dimethyl-2-phenyl-3H-pyrazol-3-one; X = BF<sub>4</sub>, ClO<sub>4</sub>), [(RO)4B](SbCl<sub>6</sub>)<sub>3</sub>, and [(RO)4M](SbCl<sub>6</sub>)<sub>4</sub> (M = Sn, Ti) were prepared and characterized by elemental anal. (except [R(O)X]), <sup>13</sup>C, <sup>1</sup>H, <sup>11</sup>B NMR and IR spectral measurements. These compds. are proposed as intermediates in the acid-catalyzed electrophilic substitution of RO.  
 IT 84663-13-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 84663-13-8 CAPLUS  
 CN Boron(3+), tetrakis(1,2-dihydro-1,5-dimethyl-2-phenyl-3H-pyrazol-3-one-O)-, (T-4)-, tris[OC-6-11]-hexachloroantimonate(1-)] (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 84663-12-7  
 CMF C44 H48 B N8 O4  
 CCI CCS

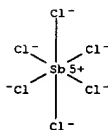


CM 2  
 CRN 17949-89-2  
 CMF C16 Sb  
 CCI CCS

L12 ANSWER 95 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



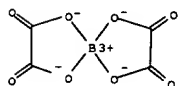
L12 ANSWER 96 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L12 ANSWER 97 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1982:537689 CAPLUS  
 DOCUMENT NUMBER: 97:137689  
 TITLE: Boron complexes with dicarboxylic acids:  
 bis(oxalato)borates and bis(malonato)borates  
 Bessler, Eberhard; Weidlein, Johann  
 CORPORATE SOURCE: Dep. Quim., Univ. Brasilia, Brasilia, 70 910, Brazil  
 SOURCE: Zeitschrift fuer Naturforschung, Teil B:  
 Anorganische Chemie, Organische Chemie (1982), 37B(8), 1020-5  
 CODEN: ZNBAD2; ISSN: 0340-5087  
 Journal

DOCUMENT TYPE: German  
 LANGUAGE: German  
 AB Several bis(oxalato)borates and bis(malonato)borates were prepared in heterogeneous reaction from boric acid, dicarboxylic acid and dicarboxylic salt by refluxing in benzene under continuous separation of H<sub>2</sub>O. The compds. were characterized by their IR and <sup>11</sup>B NMR spectra. The vibrational spectra of the bis(oxalato)borate are discussed in detail.  
 IT 83145-84-0P 83145-92-0P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 83145-84-0 CAPLUS  
 CN Borate(1-), bis[ethanedioato(2-)-O,O']-, (T-4)-, hydrogen, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CM 1  
 CRN 83145-82-8  
 CMF C4 B O8 . H  
 CCI CCS



● H<sup>+</sup>

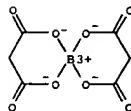
CM 2  
 CRN 110-86-1  
 CMF C5 H5 N



RN 83145-92-0 CAPLUS

L12 ANSWER 97 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 CN Borate(1-), bis[propanedioato(2-)-O,O']-, (T-4)-, hydrogen, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CM 1  
 CRN 83145-90-8  
 CMF C6 H4 B O8 . H  
 CCI CCS



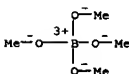
● H<sup>+</sup>

CM 2  
 CRN 110-86-1  
 CMF C5 H5 N



L12 ANSWER 98 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1982:113924 CAPLUS  
 DOCUMENT NUMBER: 96:113924  
 TITLE: Piperidinium tetramethoxyborate  
 AUTHOR(S): Alcock, Nathaniel W.; Hagger, Ruth M.; Harrison, W. David; Wallbridge, Malcolm G. H.  
 CORPORATE SOURCE: Dep. Chem. Mol. Sci., University of Warwick, Coventry, CV4 7AL, UK  
 SOURCE: Acta Crystallographica, Section B: Structural Crystallography and Crystal Chemistry (1982), B38(2), 676-7  
 CODEN: ACBCAR; ISSN: 0567-7408  
 Journal  
 DOCUMENT TYPE: English  
 LANGUAGE: English  
 AB The title salt is orthorhombic, space group Pnma, with a 13.325(3), b 9.603(2), and c 10.305(4) Å; Z = 4. The structure was solved by direct methods and refined to a final R = 0.051 for 494 reflections. Discrete cations and anions lying on mirror planes at b/2 are linked by H-bonds. Atomic coordinates are given.  
 IT 43160-43-6  
 RL: PRP (Properties)  
 (structure of)  
 RN 43160-43-6 CAPLUS  
 CN Borate(1-), tetramethoxy-, hydrogen, compd. with piperidine (1:1) (9CI) (CA INDEX NAME)

CM 1  
 CRN 49860-41-5  
 CMF C4 H12 B O4 . H  
 CCI CCS



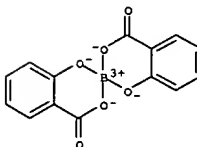
● H<sup>+</sup>

CM 2  
 CRN 110-89-4  
 CMF C5 H11 N



L12 ANSWER 99 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1979:72255 CAPLUS  
 DOCUMENT NUMBER: 90:72255  
 TITLE: The preparation and properties of some bis(salicylate)borate(III) salts with large cations  
 AUTHOR(S): Bassett, J.; Matthews, P. J.  
 CORPORATE SOURCE: Sch. Chem., Thames Polytech., London, UK  
 SOURCE: Journal of Inorganic and Nuclear Chemistry (1978), 40(6), 987-92  
 CODEN: JINCAO; ISSN: 0022-1902  
 Journal  
 DOCUMENT TYPE: English  
 LANGUAGE: English  
 AB Complexes of [BL<sub>2</sub>]- (HL = salicylic acid) with various cations (e.g., NH<sub>4</sub>, Bu<sub>4</sub>P, methylene blue) were prepared and characterized by anal. and IR, mass, and NMR spectral data. Analogous complexes with substituted salicylates were prepared and characterized similarly. The solvation of [NH<sub>4</sub>][BL<sub>2</sub>] (HL = 5-bromosalicylic acid) by MeCOR (R = Me, Et, iso-Bu) and Me<sub>2</sub>CHOH was studied.  
 IT 69030-71-3P 69030-85-9P 69030-91-7P  
 69030-97-3P 69030-98-4P 69030-99-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 69030-71-3 CAPLUS  
 CN Borate(1-), bis[2-hydroxybenzoato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with piperidine (1:1) (9CI) (CA INDEX NAME)

CM 1  
 CRN 22450-97-1  
 CMF C14 H8 B O6 . H  
 CCI CCS



● H<sup>+</sup>

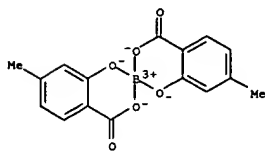
CM 2  
 CRN 110-89-4  
 CMF C5 H11 N



RN 69030-85-9 CAPLUS  
CN Borate(1-), bis[2-hydroxy-4-methylbenzoato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 69030-83-7  
CMF C16 H12 B O6 . H  
CCI CCS



● H<sup>+</sup>

CM 2

CRN 110-86-1  
CMF C5 H5 N



RN 69030-91-7 CAPLUS  
CN Borate(1-), bis[2-hydroxy-3,5-bis(1-methylethyl)benzoato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 69030-89-3  
CMF C26 H32 B O6 . H  
CCI CCS

CM 2

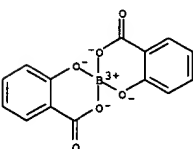
CRN 536-75-4  
CMF C7 H9 N



RN 69030-98-4 CAPLUS  
CN Borate(1-), bis[2-(hydroxy-κO)benzoato(2-)-κO]-, (T-4)-, hydrogen, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 22450-97-1  
CMF C14 H8 B O6 . H  
CCI CCS



● H<sup>+</sup>

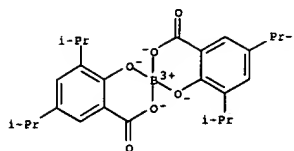
CM 2

CRN 110-86-1  
CMF C5 H5 N



RN 69030-99-5 CAPLUS  
CN Borate(1-), bis[2-hydroxybenzoato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 2-methylpyridine (1:1) (9CI) (CA INDEX NAME)

CM 1



● H<sup>+</sup>

CM 2

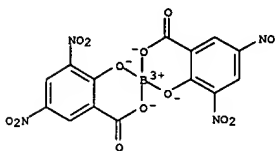
CRN 110-86-1  
CMF C5 H5 N



RN 69030-97-3 CAPLUS  
CN Borate(1-), bis[2-hydroxy-3,5-dinitrobenzoato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with 4-ethylpyridine (1:1) (9CI) (CA INDEX NAME)

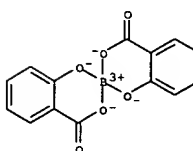
CM 1

CRN 69030-96-2  
CMF C14 H4 B N4 O14 . H  
CCI CCS



● H<sup>+</sup>

CRN 22450-97-1  
CMF C14 H8 B O6 . H  
CCI CCS



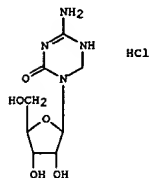
● H<sup>+</sup>

CM 2

CRN 109-06-8  
CMF C6 H7 N

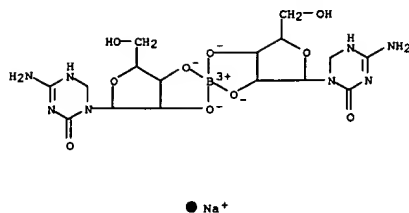


L12 ANSWER 100 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1977:433521 CAPLUS  
 DOCUMENT NUMBER: 87:33521  
 TITLE: Synthesis and antitumor activity of dihydro-5-azacytidine, a hydrolytically stable analog of 5-azacytidine  
 AUTHOR(S): Beisler, John A.; Abbasi, Mohamed M.; Kelley, James A.; Driscoll, John S.  
 CORPORATE SOURCE: Natl. Cancer Inst., NIH, Bethesda, MD, USA  
 SOURCE: Journal of Medicinal Chemistry (1977), 20(6), 806-12  
 CODEN: JMCMAR; ISSN: 0022-2623  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

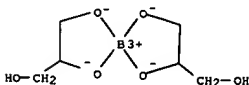


AB Borohydride reduction of 5-azacytidine [320-67-2] gave 5,6-dihydro-5-azacytidine-HCl (I) [62402-31-7] after acid hydrolysis of a boron-containing intermediate. Contrary to 5-azacytidine, which is easily hydrolyzed, I was completely stable at room temperature in aqueous solns. over a broad pH range for up to 3 weeks. I showed good activity in L1210 systems when administered i.p. or orally to mice. Although higher dose levels were necessary, I had approx. 80% of the antitumor efficacy shown by 5-azacytidine. Neither I nor 5-azacytidine showed a dependency on administration schedule. Cross-resistance between I and 5-azacytidine was demonstrated. I was superior to 5-azacytidine in therapeutic index and in its ability to cross the blood-brain barrier in sufficient quantity to be therapeutic against intracranially implanted L1210 cells. I may be a prodrug of 5-azacytidine.  
 IT 62769-14-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 RN 62769-14-6 CAPLUS  
 CN Borate(1-), bis[4-amino-1-β-D-ribofuranosyl-1,3,5-triazin-2(1H)-onato(2-)-O2',O3']-, sodium, (T-4)- (9CI) (CA INDEX NAME)

L12 ANSWER 100 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L12 ANSWER 101 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1974:5158 CAPLUS  
 DOCUMENT NUMBER: 80:5158  
 TITLE: Semipolar organoboron surfactants. I. Preparation of oil-soluble organoboron surfactants  
 AUTHOR(S): Hamanaka, Hiroyoshi  
 CORPORATE SOURCE: Surfactant Res. Lab., Toho Chem. Ind. Co., Tokyo, Japan  
 SOURCE: Yukagaku (1973), 22(8), 426-33  
 CODEN: YKGMAM; ISSN: 0513-398X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Japanese  
 AB Glycerol [56-81-5] reacted with triethyl borate [150-46-9] at 130-50.deg. in 3 hr to give bisglycerol borate (I) [49625-59-4], which reacted further with fatty acids, e.g., caprylic acid [124-07-2], giving oil-soluble semipolar organoboron surfactants, such as bisglycerol borate dicaprylate [31973-04-3], with better surface-active properties than α-monoglycerides or their di-H borates.  
 IT 50258-91-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 RN 50258-91-8 CAPLUS  
 CN Borate(1-), bis[1,2,3-propanetriolato(2-)-O1,O2]-, (T-4)-, hydrogen, compd. with pyridine (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 49625-59-4  
 CMF C6 H12 B O6 . H  
 CCI CCS



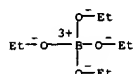
● H<sup>+</sup>

CM 2  
 CRN 110-86-1  
 CMF C5 H5 N



L12 ANSWER 101 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L12 ANSWER 102 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1973:532421 CAPLUS  
 DOCUMENT NUMBER: 79:132421  
 TITLE: Lewis acidity of trialkoxyboranes. Reinvestigation  
 AUTHOR(S): Wilson, John W.  
 CORPORATE SOURCE: Sch. Phys. Sci., New Univ. Ulster, Coleraine, UK  
 SOURCE: Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry (1972-1999) (1973), (16), 1628-30  
 CODEN: JCDTBI; ISSN: 0300-9246  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB B(OR)3 (R = Me, Et, Me2CH) formed onium salts containing [B(OR)4]- anions when reacted with piperidine, ethylenediamine, Et2NH, or cyclohexylamine in the presence of ROH, rather than Lewis acid-base adducts as previously reported (Ganbeau, J.; Link, R., 1951). The thermodyn. stability of the salts is critically dependent on the crystal lattice energy. B(OPh)3 formed both L.B(OPh)3 and LH[B(OPh)4] (L = piperidine).  
 IT 43213-04-3F  
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)  
 RN 43213-04-3 CAPLUS  
 CN Borate(1-), tetraethoxy-, hydrogen, compd. with piperidine (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 49861-34-9  
 CMF C8 H20 B O4 . H  
 CCI CCS



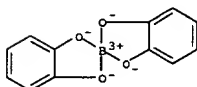
● H<sup>+</sup>

CM 2  
 CRN 110-89-4  
 CMF C5 H11 N



L12 ANSWER 103 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)  
 (1:1) (8CI) (CA INDEX NAME)

CM 1  
 CRN 22450-98-2  
 CMF C12 H8 B O4 . H  
 CCI CCS



● H<sup>+</sup>

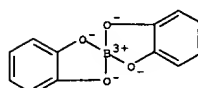
CM 2  
 CRN 108-99-6  
 CMF C6 H7 N



RN 30776-64-8 CAPLUS  
 CN Borate(1-), bis[pyrogallolato(2-)]-, hydrogen, compd. with 2-picoline (8CI) (CA INDEX NAME)

CM 1  
 CRN 46944-61-0  
 CMF C12 H8 B O6 . H  
 CCI CCS

L12 ANSWER 103 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1971:10679 CAPLUS  
 DOCUMENT NUMBER: 74:10679  
 TITLE: Combinations of boric acid with di- and triphenols  
 AUTHOR(S): Cismaru, D.; Cristescu, Virginia  
 CORPORATE SOURCE: Lab. Chim. Anorg., Fac. Farm., Bucharest, Rom.  
 SOURCE: Farmacia (Bucharest, Romania) (1970), 18(9), 531-7  
 CODEN: FRMBAZ; ISSN: 0014-8237  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Romanian  
 GI For diagram(s), see printed CA Issue.  
 AB The complexes obtained by mixing boric acid with pyrocatechol or pyrogallol, and α-picoline or β-picoline, showed bactericidal activity against Salmonella, Shigella, Escherichia coli, and Proteus. As shown conductometrically, dipyrrocatecholboric ions (I) and dipyrrogallolboric ions were present in 0.01M solns.  
 IT 30776-62-6 30776-63-7 30776-64-8  
 30776-65-9  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (bactericidal activity of)  
 RN 30776-62-6 CAPLUS  
 CN Borate(1-), bis[1,2-benzenediolato(2-)-κO,κO']-, (T-4)-, hydrogen, compd. with 2-methylpyridine (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 22450-98-2  
 CMF C12 H8 B O4 . H  
 CCI CCS



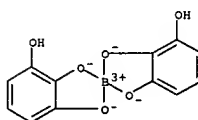
● H<sup>+</sup>

CM 2  
 CRN 109-06-8  
 CMF C6 H7 N



RN 30776-63-7 CAPLUS  
 CN Borate(1-), bis[pyrocatecholato(2-)]-, hydrogen, compd. with 3-picoline

L12 ANSWER 103 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



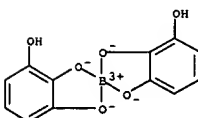
● H<sup>+</sup>

CM 2  
 CRN 109-06-8  
 CMF C6 H7 N



RN 30776-65-9 CAPLUS  
 CN Borate(1-), bis[pyrogallolato(2-)]-, hydrogen, compd. with 3-picoline (1:1) (8CI) (CA INDEX NAME)

CM 1  
 CRN 46944-61-0  
 CMF C12 H8 B O6 . H  
 CCI CCS



● H<sup>+</sup>

CM 2  
 CRN 108-99-6  
 CMF C6 H7 N



L12 ANSWER 104 OF 105 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1969:14981 CAPLUS  
 DOCUMENT NUMBER: 70:14981  
 TITLE: Hydrolysis of trimethyl boric acid ester in the presence of organic bases  
 AUTHOR(S): Heller, G.  
 CORPORATE SOURCE: Freie Univ., Berlin, Fed. Rep. Ger.  
 SOURCE: Journal of Inorganic and Nuclear Chemistry (1968), 30(10), 2743-54  
 CODEN: JINCAO; ISSN: 0022-1902

DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 AB Hydrolysis of trimethyl boric acid ester in the presence of organic bases in

an organic solvent yields the following polyborates: the guanidinium salts

[C(NH<sub>2</sub>)<sub>3</sub>]<sub>2</sub>[B<sub>3</sub>O<sub>3</sub>(OH)<sub>5</sub>], [C(NH<sub>2</sub>)<sub>3</sub>]<sub>3</sub>[B<sub>4</sub>O<sub>5</sub>(OH)<sub>5</sub>], [C(NH<sub>2</sub>)<sub>3</sub>]<sub>4</sub>[B<sub>5</sub>O<sub>6</sub>(OH)<sub>7</sub>]; the piperidinium salts [C<sub>5</sub>NH<sub>12</sub>][B<sub>4</sub>O<sub>4</sub>(OH)<sub>5</sub>], [C<sub>5</sub>NH<sub>12</sub>][B<sub>5</sub>O<sub>6</sub>(OH)<sub>4</sub>], the tetraalkylammonium salts [Me<sub>4</sub>N][B<sub>5</sub>O<sub>6</sub>(OH)<sub>4</sub>], [Et<sub>4</sub>N][B<sub>5</sub>O<sub>6</sub>(OH)<sub>4</sub>] (I), [(C<sub>3</sub>H<sub>7</sub>)<sub>4</sub>N][B<sub>7</sub>O<sub>6</sub>(OH)<sub>10</sub>] (II), [(C<sub>4</sub>H<sub>9</sub>)<sub>4</sub>N][B<sub>7</sub>O<sub>6</sub>(OH)<sub>10</sub>] (III), and the trialkylammonium borate [(C<sub>4</sub>H<sub>9</sub>)<sub>3</sub>NH][B<sub>7</sub>O<sub>6</sub>(OH)<sub>10</sub>] (IV). From aqueous

sols. the evaporation of boric acid with an organic base results also in the formation of I, II, III, IV, and the guanidinium salt [C(NH<sub>2</sub>)<sub>3</sub>][B<sub>5</sub>O<sub>6</sub>(OH)<sub>4</sub>]. Only the compound [Me<sub>4</sub>N][B<sub>5</sub>O<sub>6</sub>(OH)<sub>4</sub>].4H<sub>2</sub>O containing crystal water forms an exception.

All these polyborates undergo dissociation on dissoln., even in organic solvents like MeOH or Me<sub>2</sub>CO, to give lower mol. species. The structures of the new

polyborates are discussed.

IT 12386-39-9, Boric acid (H<sub>6</sub>B<sub>4</sub>O<sub>9</sub>), compound with piperidine (1:1)

12548-84-4, Boric acid (H<sub>5</sub>B<sub>5</sub>O<sub>10</sub>), compound with piperidine (1:1)

RL: PRP (Properties)

(spectrum of, ir)

RN 12386-39-9 CAPLUS

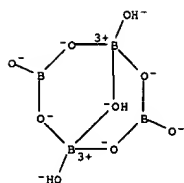
CM Borate(3-), μ-hydroxydihydroxybis[μ-(orthoborate(3-)-O:O')]di-, trihydrogen, compd. with piperidine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 12447-38-0

CMF B4 H3 O9 . 3 H

CCI CCS



● 3 H<sup>+</sup>

CM 2

CRN 110-89-4

CMF C5 H11 N



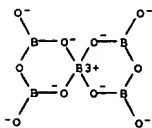
RN 12548-84-4 CAPLUS  
 CM Borate(5-), bis[μ-oxotetraoxodiborate(4-)]-, (7-4)-, pentahydrogen, compd. with piperidine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 92258-67-8

CMF B5 O10 . 5 H

CCI CCS



● 5 H<sup>+</sup>

CM 2

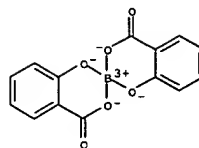
CRN 110-89-4

CMF C5 H11 N

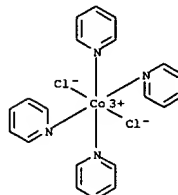


L12 ANSWER 105 OF 105 CAPLUS COPYRIGHT 2006 ACS ON STN  
 ACCESSION NUMBER: 1968:56059 CAPLUS  
 DOCUMENT NUMBER: 68:56059  
 TITLE: Metal complexes of borosalicylic acid and related substances  
 AUTHOR(S): Spacu, Petru; Gafiteanu, Mioara  
 CORPORATE SOURCE: Univ. Bucharest, Bucharest, Rom.  
 SOURCE: Analele Universitatii Bucuresti, Seria Stiintele Naturii (1966), 15(1), 33-49  
 CODEN: ABSNB3; ISSN: 0524-8302  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Romanian  
 GI For diagram(s), see printed CA Issue.  
 AB Novel complexes were obtained between anions I, II, and III and the tetra- and hexamine complexes of Co, Ni, and Cr. The uv and visible spectra were studied and conductometric measurements were made. The existence of the ions I, II, and III was confirmed via double exchange reactions. The complexes  $[\text{Co}(\text{NH}_3)_4(\text{H}_2\text{O})_2]\text{L}_3$ ,  $[\text{Co}(\text{NH}_3)_6]\text{L}_3$ ,  $[\text{Co}(\text{en})_3]\text{L}_3$ ,  $[\text{Co}(\text{pn})_3]\text{L}_3$ ,  $[\text{Co}(\text{dipy})_3]\text{L}_3$ ,  $[\text{Co}(\text{phen})_3]\text{L}_3$ , where  $\text{L} = [\text{B}(\text{C}_6\text{H}_4\text{O}_3)_2]$ , dipy = dipyriddy, and phen = o-phenanthroline, were obtained from  $\text{NH}_4[\text{B}(\text{C}_6\text{H}_4\text{O}_3)_2]$  and the resp. amine complexes in concentration aqueous solns., chilled with ice and under constant agitation. The salts obtained with  $[\text{Co}(\text{phen})_3]\text{Cl}_3$  and  $[\text{Co}(\text{dipy})_3]\text{Cl}_3$  exhibited a greater stability and are more insol. than the other new complexes. The following were also prepared via double exchange reactions:  $[\text{Co}(\text{en})_2\text{Cl}_2]\text{L}$ ,  $[\text{Co}(\text{en})_2(\text{SCN})_2]\text{L}$ ,  $[\text{Co}(\text{dipy})_2\text{Cl}_2]\text{L}$ ,  $[\text{Co}(\text{py})_4\text{Cl}_2]\text{L}$ .  $[\text{Cr}(\text{NH}_3)_6]\text{L}_3$ ,  $[\text{Cr}(\text{en})_3]\text{L}_3$ , and  $[\text{Cr}(\text{en})_2(\text{SCN})_2]\text{L}$  were prepared as above. The preparation of  $[\text{Co}(\text{en})_3]\text{L}_3$  was difficult due to sensitivity to humidity and lack of stability at ambient conditions.  $[\text{Ni}(\text{phen})_3]\text{L}_2$  and  $[\text{Ni}(\text{dipy})_3]\text{L}_2$  were prepared via coupling with the Ni salts and are stable in the absence of humidity. The salts of II were prepared from  $\text{NH}_4[\text{B}(\text{C}_6\text{H}_4\text{O}_2)_2]$  and the resp. ammine complexes.  $[\text{Co}(\text{dipy})_3]\text{X}_3$  and  $[\text{Co}(\text{phen})_3]\text{X}_3$  were obtained, where  $\text{X} = [\text{B}(\text{C}_6\text{H}_4\text{O}_2)_2]$ . Other attempts to obtain complexes with various tetra-, penta, and hexamines were unsuccessful due to the highly dissociated state of the II ion in aqueous solution. The existence of the III ion in solution was evidenced for the 1st time by the preparation of the complexes  $[\text{Co}(\text{en})_2\text{Cl}_2]\text{R}$  and of  $[\text{Co}(\text{en})_2(\text{SCN})_2]\text{R}$ , which are very stable, where  $\text{R} = [\text{B}(\text{C}_6\text{H}_5\text{NO}_3)_2]$ .  
 IT 20149-68-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 20149-68-2 CAPLUS  
 CH Cobalt(1+), dichlorotetrakis(pyridine)-, bis[salicylato(2-)]borate(1-)  
 (8CI) (CA INDEX NAME)  
 CM 1  
 CRN 38403-08-6  
 CMF C14 H8 B O6  
 CCI CCS

L12 ANSWER 105 OF 105 CAPLUS COPYRIGHT 2006 ACS ON STN (Continued)



CM 2  
 CRN 18955-02-7  
 CMF C20 H20 Cl2 Co N4  
 CCI CCS





=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

535.43

792.20

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-78.75

-78.75

STN INTERNATIONAL LOGOFF AT 09:17:38 ON 09 MAR 2006